CDX-CA537X

MANUAL DE SERVIÇO

Brazilian Model

• As seções de rádio e CD não requerem ajustes.

Modelo que usa mecanismo similar	CDX-L300/L460X
Tipo do Mecanismo do CD	MG-393XA-121//K
Nome da Unidade Óptica	KSS-720A

Especificações Técnicas

Reprodutor de CD

Relação sinal/ruído	90 dB
Resposta de freqüência	10 – 20.000 Hz
Wow e flutter	Abaixo do limite mensurável

Rádio

FM

Faixa de sintonia	Intervalo de sintonia de FM 87,5 – 107,9 MHz (em intervalos de 200 kHz)
Antena	Conector de antena externa
Freqüência intermediária	10,7 MHz
Sensibilidade útil	11 dBf
Seletividade	75 dB a 400 kHz
Relação sinal/ruído	65 dB (estéreo), 68 dB (mono)
Distorção harmônica a 1 kHz	0,7 % (estéreo), 0,5 % (mono)
Separação	33 dB a 1 kHz
Resposta de freqüência	30 – 15.000 Hz

AM

Faixa de sintonia	Intervalo de sintonia de AM 530 – 1.710 kHz
Antena	Conector de antena externa
Freqüência intermediária	450 kHz
Sensibilidade	30 μV

Amplificador

Saídas	Saídas para alto-falantes (conectores bem selados)
Impedância do alto-falante	4 – 8 ohms
Saída máxima	50 W × 4 (a 4 ohms)

Geral

Saídas	Saída de áudio Controle da antena elétrica Controle do amplificador de potência
Controle de tom	Grave ±9 dB a 100 Hz Agudos ±9 dB a 10 kHz
Alimentação	Bateria do automóvel 12 V DC (terra negativo)
Dimensões	Aprox. 182 × 53 × 161 mm (L x A x P)
Peso	Aprox. 1,2 kg
Acessórios fornecidos	Acessórios para instalação e conexão (1 jogo) Estojo para o painel frontal (1) Controle remoto sem fio RM-X115 (CDX-CA587X)
Acessórios opcionais	Controle remoto sem fio RM-X115 (CDX-CA537X / CDX-CA537XG / CDX-CA537XP / CDX-CA537VW) Cabo BUS Cabo com plugue RCA
Equipamentos opcionais	CD Changer (10 discos) CDX-647X

Nota

Este aparelho não pode ser conectado a um pré-amplificador digital ou a um equalizador.

Projetos e especificações técnicas sujeitos a alteração sem prévio aviso.

Auto Rádio FM Estéreo/AM com toca-discos a laser

SONY®

NOTAS DE SERVIÇO

NOTAS SOBRE O MANUSEIO DA UNIDADE ÓPTICA

O diodo laser da unidade óptica é sensível a descargas eletroestáticas podendo vir a ser danificado por descargas causadas por roupas ou mesmo pelo corpo humano. Durante o reparo tenha cuidado para não causar danos à unidade, devido a cargas eletroestáticase siga corretamente os procedimentos descritos nesse manual para a execução de reparos e troca de componentes.
As placas de circuito impresso são facilmetne danificadas, tenha cuidado ao manuseá-las.

NOTAS SOBRE A EMISSÃO DO DIODO LASER

O feixe laser nesse modelo é concentrado e deve ser focado na superfície reflexiva do disco, pela lente objetiva da unidade óptica. Quando observar a emissão do diodo laser, tome o cuidado de estar no mínimo a 30cm da lente objetiva.

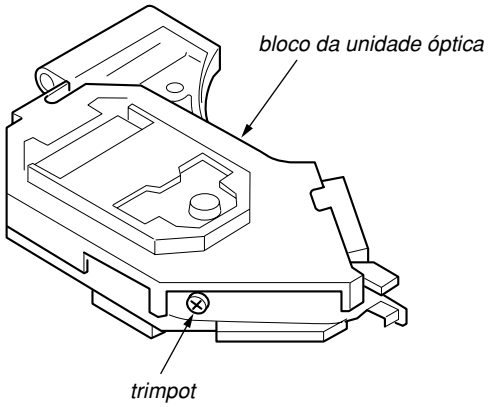
Notas sobre componentes do tipo chip

- Nunca reutilize um componente tipo chip.
- Informamos que os capacitores eletrolíticos de tântalo podem ser danificados se expostos a altas temperaturas.

ATENÇÃO

O uso dos controles, ajustes ou execução de procedimentos que não sejam os descritos nesse manual, podem causar exposição a uma perigosa radiação.

Se a unidade óptica estiver danificada, por favor troque todo o bloco da unidade óptica.
Nunca gire o trimpot localizado na lateral da unidade óptica.



DISCOS DE TESTE

Este aparelho reproduz CD-R e CD-ROM. Os seguintes discos de tesde tevem ser usados para testar a capacidade:

CD-R test disc TCD-R082LMT (Part No. J-2501-063-1)
CD-RW test disc TCD-W082L (Part No. J-2501-063-2)

Notas sobre CD-R/CD-RW

- Você pode reproduzir CD-Rs (CDs graváveis)/CD-RWs (CDs regraváveis) de áudio nesse aparelho.
  Veja estes símbolos para identificar CD-Rs/CD-RWs para áudio.

Estes símbolos denotam que o disco não é para áudio:

- Alguns CD-Rs/CD-RWs (dependendo do equipamento usado para gravar e das condições do disco) pode não ser reproduzido nessa unidade.
- Você não pode reproduzir um CD-R/CD-RW que não foi finalizado*.

* O processor necessário para gravar um CD-R/CD-RW para que possa ser reproduzido em um CD Player.

ATENÇÃO COM OS COMPONENTES DE SEGURANÇA !

OS COMPONENTES IDENTIFICADOS COM A MARCA ⚠ NOS DIAGRAMAS ESQUEMÁTICOS OU NA LISTA DE PEÇAS SÃO CRÍTICOS PARA A SEGURANÇA. SOMENTE OS SUBSTITUA POR PEÇAS NUMERICAMENTE IDENTIFICADAS NESSE MANUAL OU EM SUPLEMENTOS PUBLICADOS PELA SONY.

ÍNDICE

1. GERAL
Localização dos Controles..... 4

Conexões..... 5

2. DESMONTAGEM
2-1. Sub Painel Montado 6
2-2. CD Mechanism Block 7
2-3. Placa Principal 7
2-4. Dissipador 8
2-5. Chassis (T) Montado 8
2-6. Lever 9
2-7. Placa Servo 9
2-8. Rolete Montado 10
2-9. Bloco Flutuante 10
2-10. Bloco da Unidade Óptica 11

3. DIAGRAMAS
3-1. Descrição dos Pinos dos ICs..... 12
3-2. Diagrama em Bloco – Seção CD– 14
3-3. Diagrama em Bloco –Seção Tuner– 15
3-4. Diagrama em Bloco –Seção Display– 16
3-5. Localização das Placas de Circuito 16
3-6. Placas de Circuito Impresso –Mecanismo do CD– 17
3-7. Diagrama Esquemático –Mecanismo do CD– 19
3-8. Placa de Circuito Impresso –Placa Principal– 20
3-9. Diagrama Esquemático –Placa Principal (1/2)– 21
3-10. Diagrama Esquemtico –Placa Principal (2/2)– 22
3-11. Placa de Circuito Impresso –Seção Display– 24
3-12. Diagrama Esquemático –Seção Display– 24

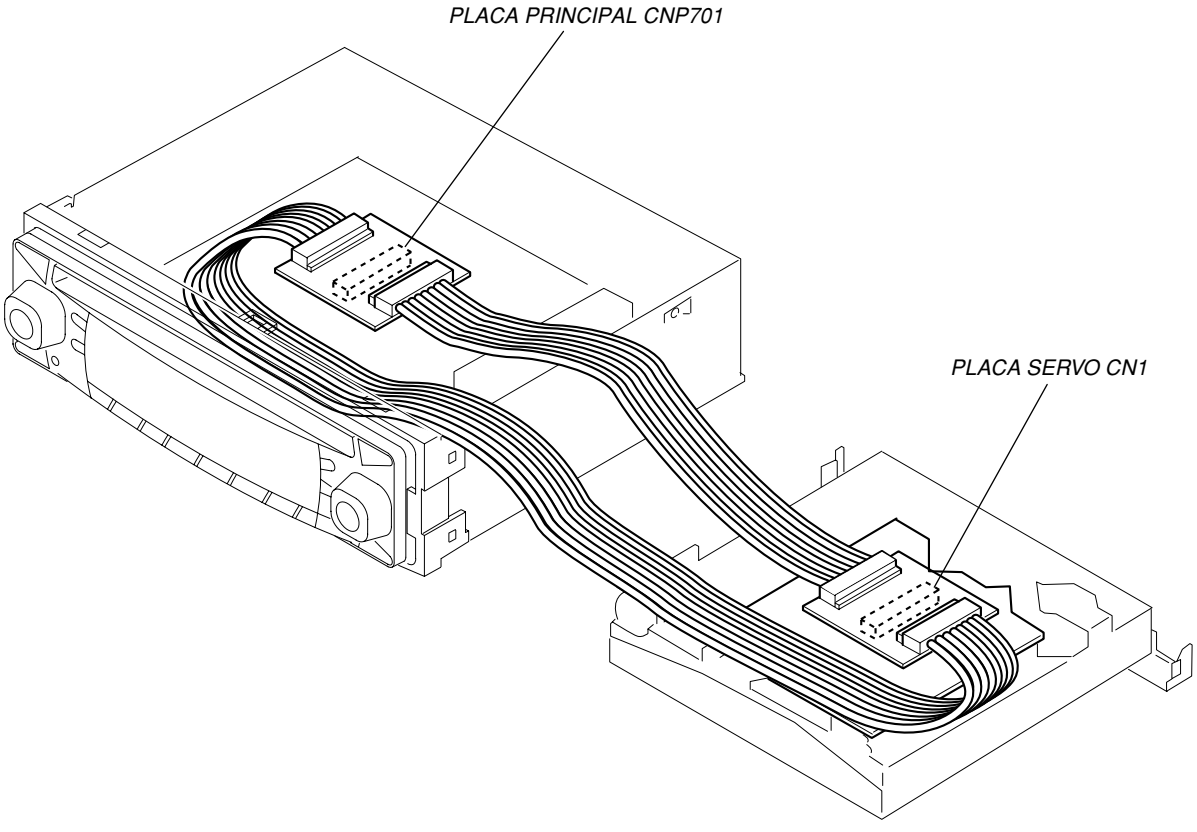
4. VISTAS EXPLODIDAS
4-1. Chassis 27
4-2. Painel Frontal 28
4-3. Mecanismo do CD (1) 29
4-4. Mecanismo do CD (2) 30
4-5. Mecanismo do CD (3) 31

5. LISTA DE PEÇAS ELÉTRICAS 32

CABO DE EXTENSÃO E POSIÇÃO DE SERVIÇO

Quando reparar este aparelho, conecte o jig (cabo de extensão) como mostrado abaixo:

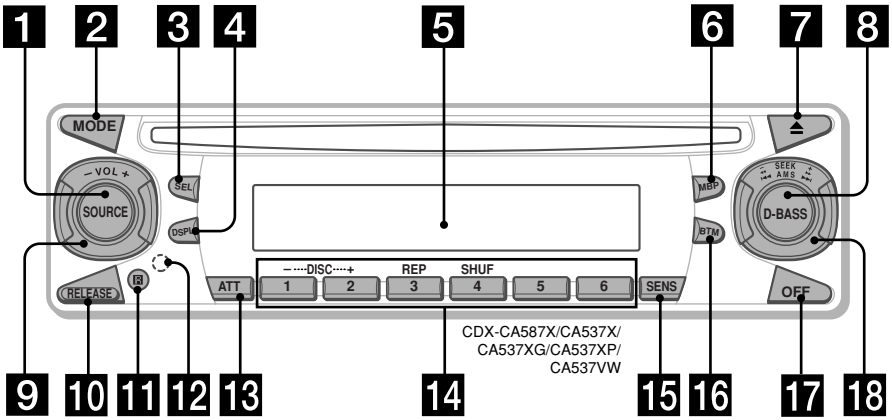
• Conecte a placa principal (MAIN) (CNP701) e a placa SERVO (CN1) com o cabo de extensão. (Part No. J-2502-062-1).



SEÇÃO 1
GERAL

Localização e função de controles

Painel frontal



Para maiores detalhes consulte as páginas indicadas.

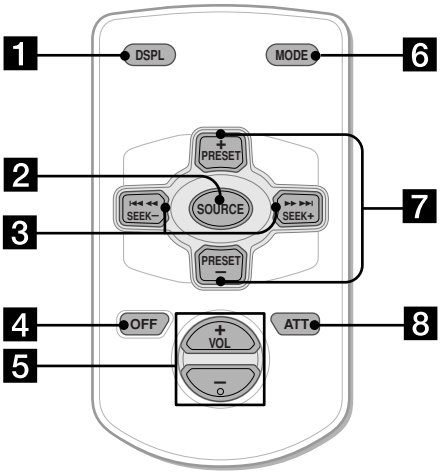
1 **Tecla SOURCE liga o aparelho (Turner/ CD/MD) 8, 9, 10, 11**
2 **Tecla MODE 9, 10, 11**
3 **Tecla SEL (seleção) 8, 12, 13**
4 **Tecla DSPL (mudança do modo de visualização) 8, 9, 10**
5 **Visor de indicações**
6 **Tecla MBP (Minha Melhor Posição de escuta - My Best sound Position) 13**
7 **Tecla ⏏ (ejeção do disco) 8**
8 **Tecla D-BASS 13**
9 **Anel de controle VOL (volume) –/+ 8, 12**
10 **Tecla RELEASE (libera o painel frontal) 7**
11 **Sensor do controle remoto**
12 **Tecla RESET** (localizada na parte frontal do aparelho, sem o painel frontal) **7**
13 **Tecla ATT (atenuar) 12**
14 **Teclas numéricas 11, 12**
   ① **DISC – 9**
   ② **DISC + 9**
   ③ **REP 9**
   ④ **SHUF 9**
15 **Tecla SENS 11**
16 **Tecla BTM (Best Tuning Memory) 10**
17 **Tecla OFF (desliga o aparelho)*** **7, 8**
18 **Anel de controle SEEK/AMS –/+ 8, 11**

* **Advertência para a instalação em um automóvel que não possui a posição ACC (acessório) na chave de ignição**
Certifique-se de pressionar (OFF) no aparelho por aproximadamente 2 segundos para desativar a visualização do relógio após desligar o automóvel. Caso contrário, a indicação do relógio não será desativada, podendo descarregar a bateria do automóvel.

Controle remoto sem fio

As teclas correspondentes do controle remoto sem fio operam as mesmas funções das teclas do aparelho.

RM-X115 (fornecido): CDX-CA587X
RM-X115 (opcional): CDX-CA537X / CDX-CA537XG / CDX-CA537XP / CDX-CA537VW



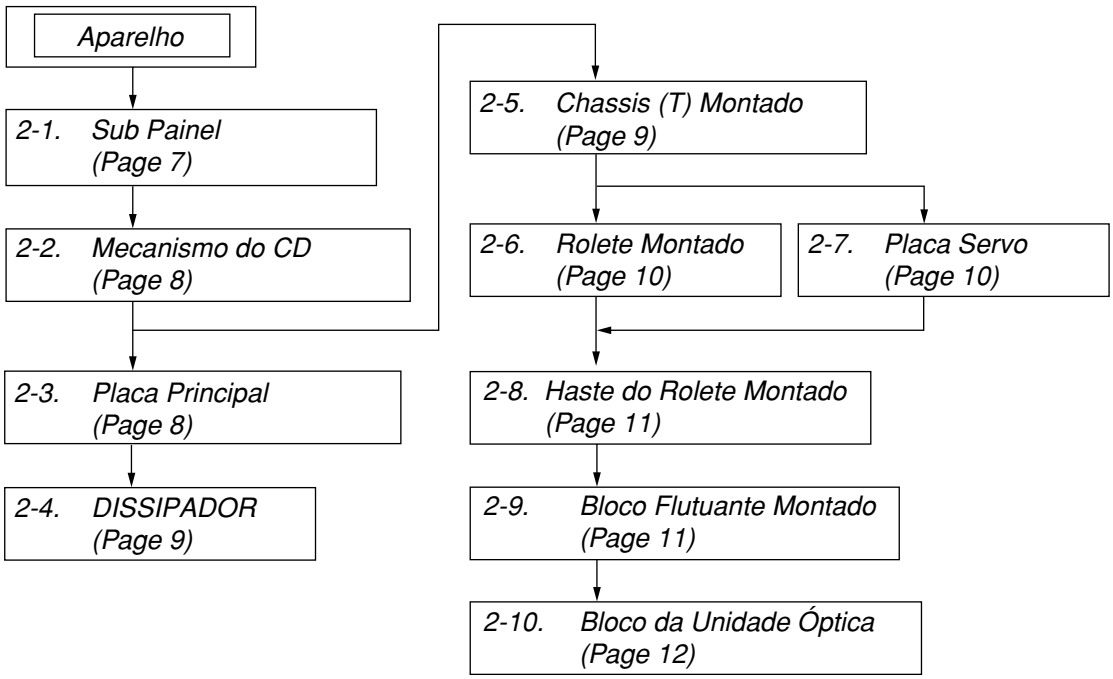
1 **Tecla DSPL**
2 **Tecla SOURCE**
3 **Teclas SEEK (–/+)**
4 **Tecla OFF**
5 **Teclas VOL (+/–)**
6 **Tecla MODE**
7 **Teclas DISC/PRESET (+/–)**
8 **Tecla ATT**

Nota
Quando o aparelho for desligado pressionando-se a tecla (OFF) por aproximadamente 2 segundos, não poderá ser operado através do controle remoto sem fio, a menos que se pressione a tecla (SOURCE) no aparelho, ou um CD seja inserido para ativá-lo.

Para maiores detalhes em como trocar a bateria de lítio, veja "Trocando a bateria de lítio" (pág. 6).

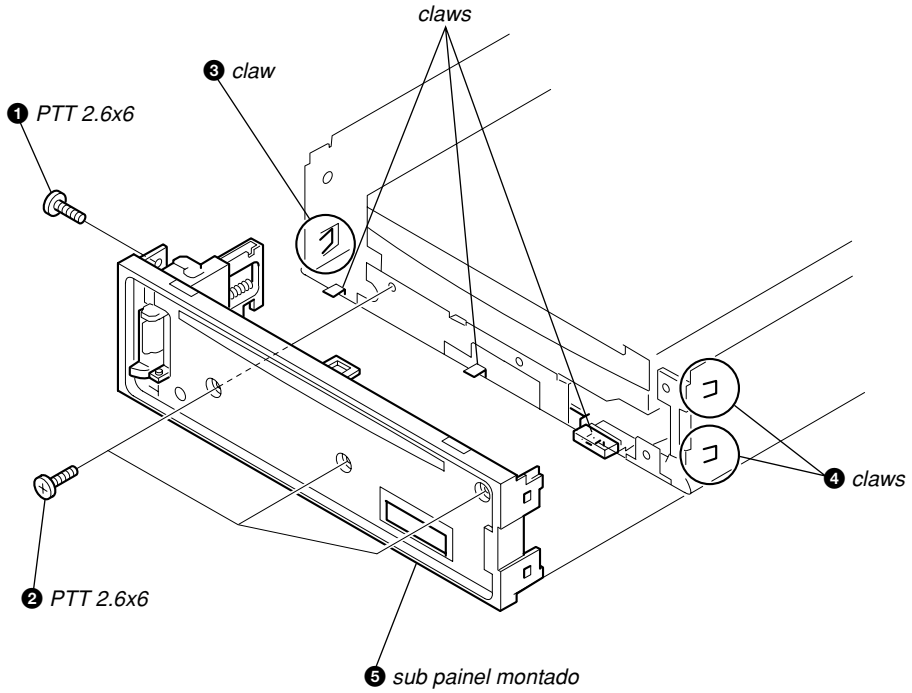
SEÇÃO 2
DESMONTAGEM

Nota : Este aparelho pode ser desmontado conforme o procedimento seguinte.

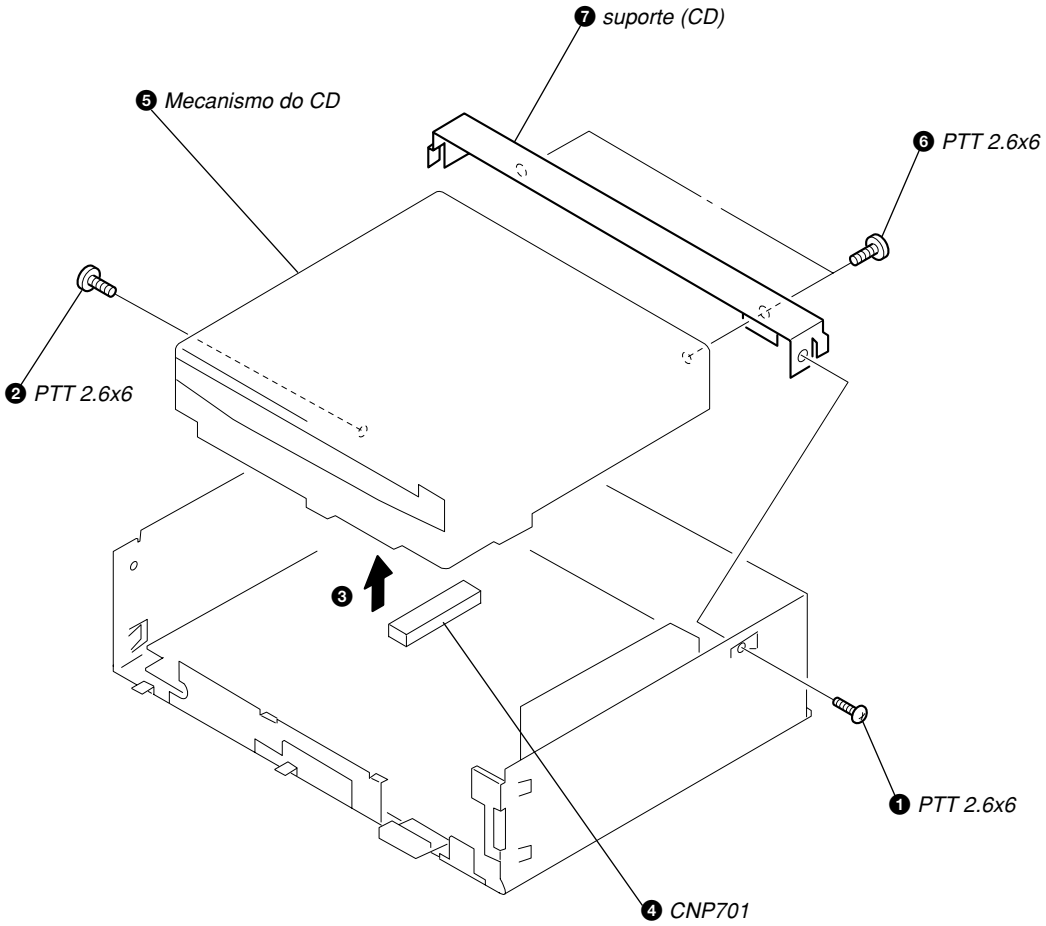

Aparelho
2-1. Sub Painel (Page 7)
2-2. Mecanismo do CD (Page 8)
2-3. Placa Principal (Page 8)
2-4. DISSIPADOR (Page 9)
2-5. Chassis (T) Montado (Page 9)
2-6. Rolete Montado (Page 10)
2-7. Placa Servo (Page 10)
2-8. Haste do Rolete Montado (Page 11)
2-9. Bloco Flutuante Montado (Page 11)
2-10. Bloco da Unidade Óptica (Page 12)

Nota : Siga o procedimento a seguir na ordem numérica dada.

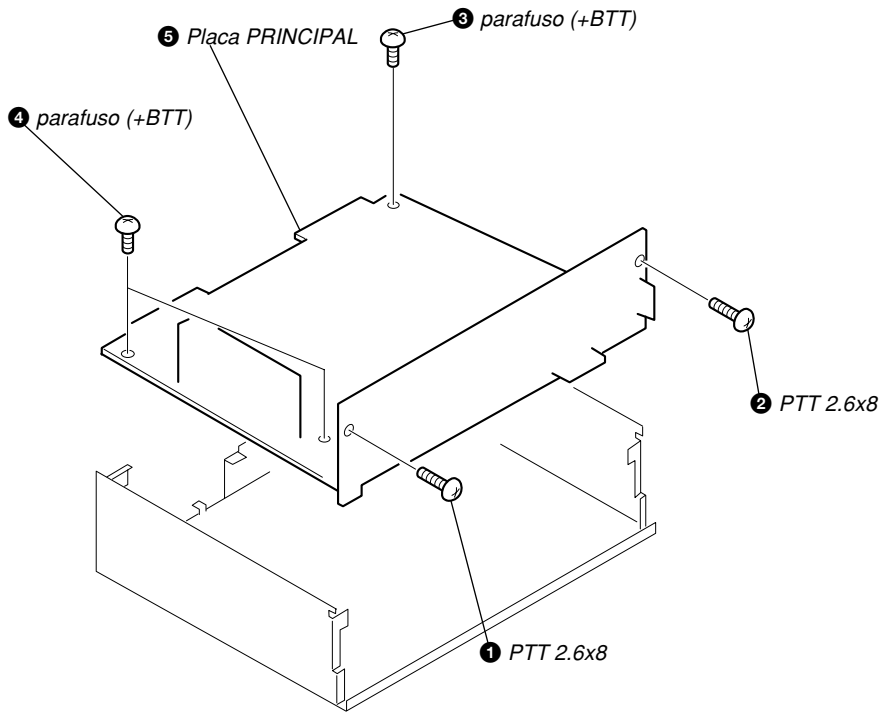
2-1. SUB PAINEL



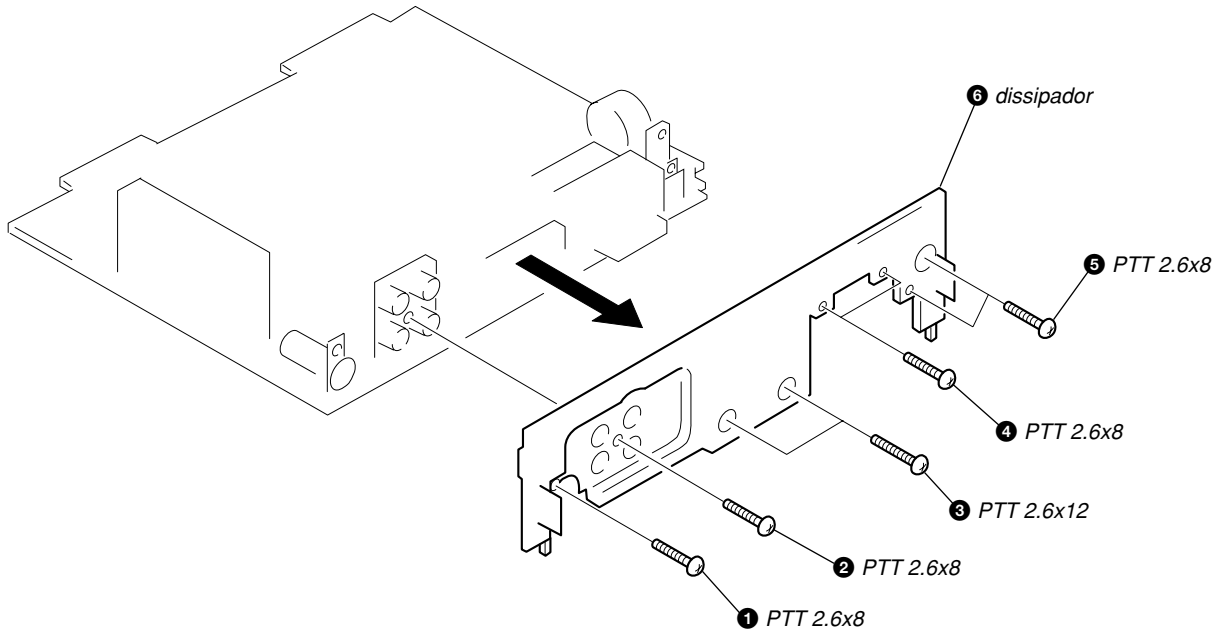
2-2. MECANISMO DO CD



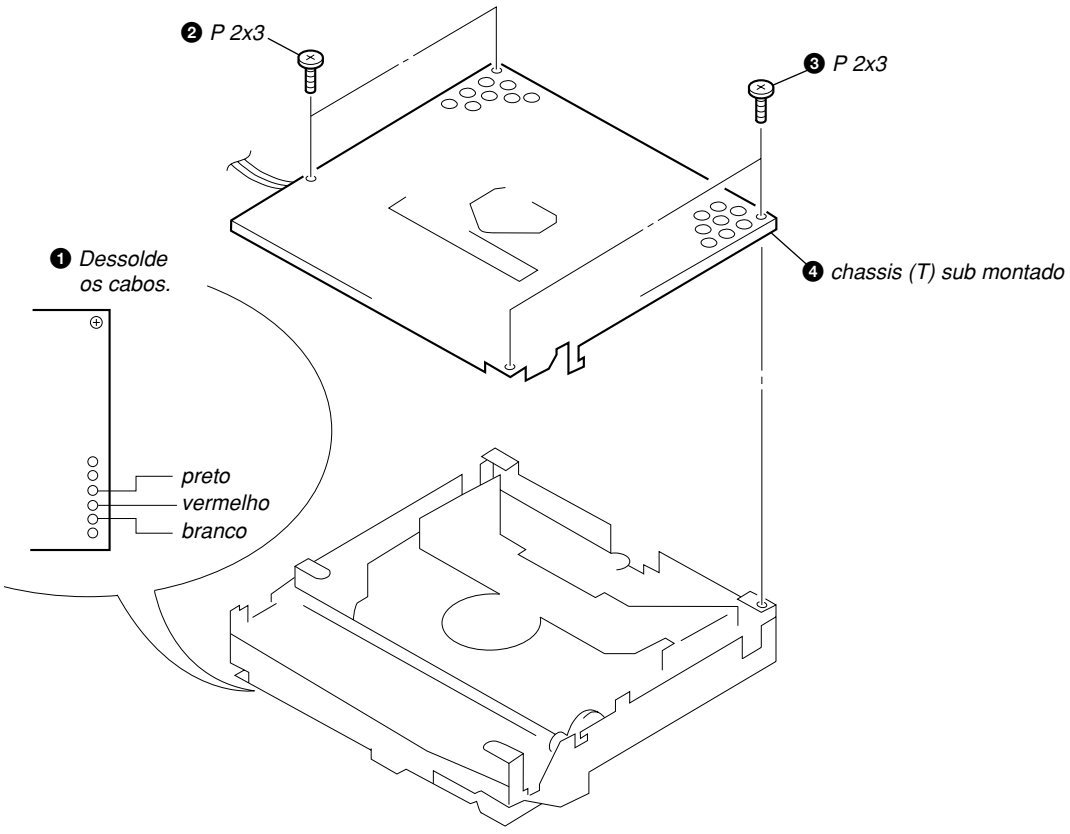
2-3. PLACA PRINCIPAL



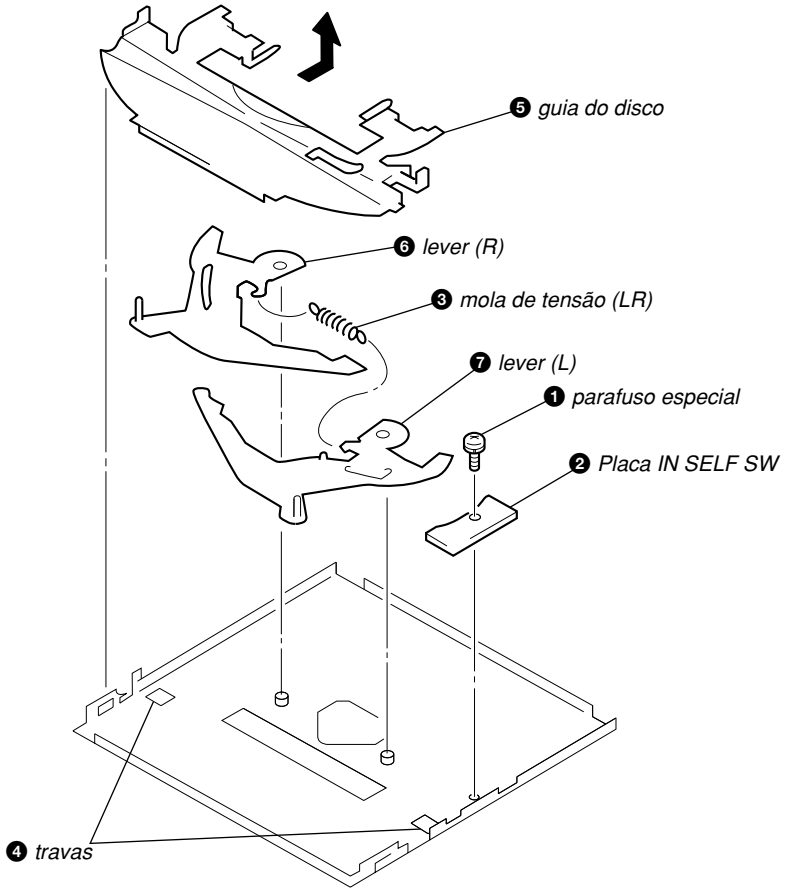
2-4. DISSIPADOR



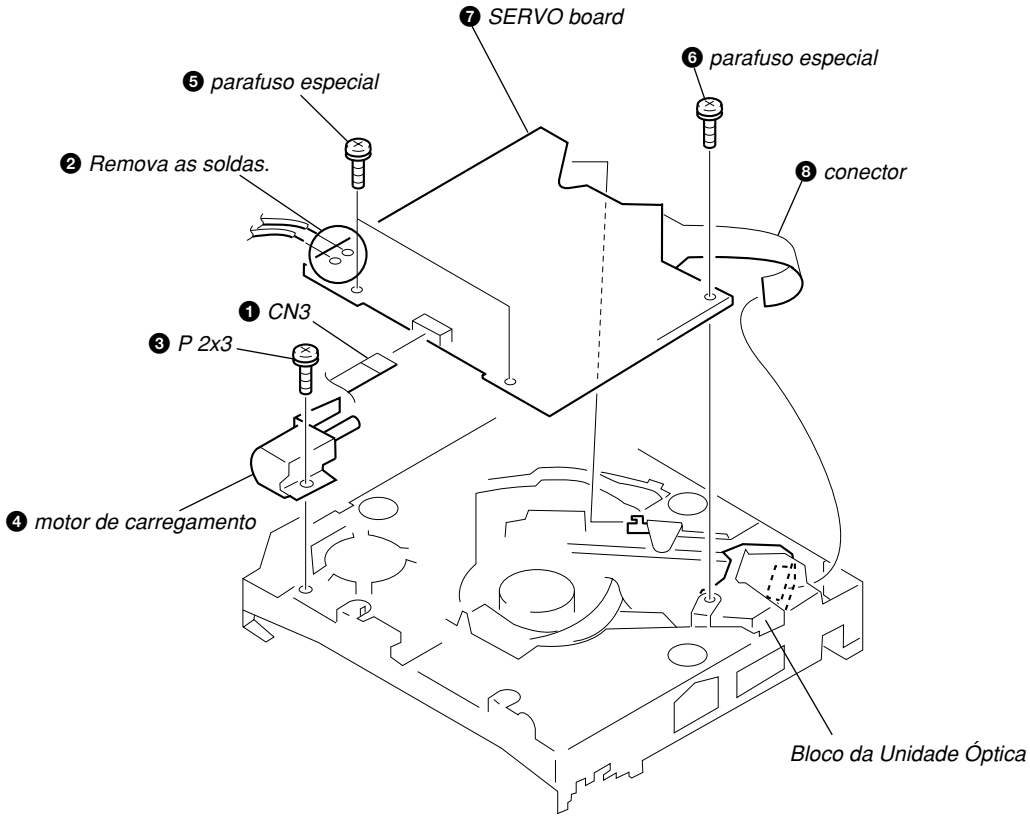
2-5. CHASSIS (T) SUB MONTADO



2-6. LEVER



2-7. PLACA SERVO



2-8. ROLETE MONTADO

• Quando instalar, certifique-se da posição correta do braço e das arruelas.

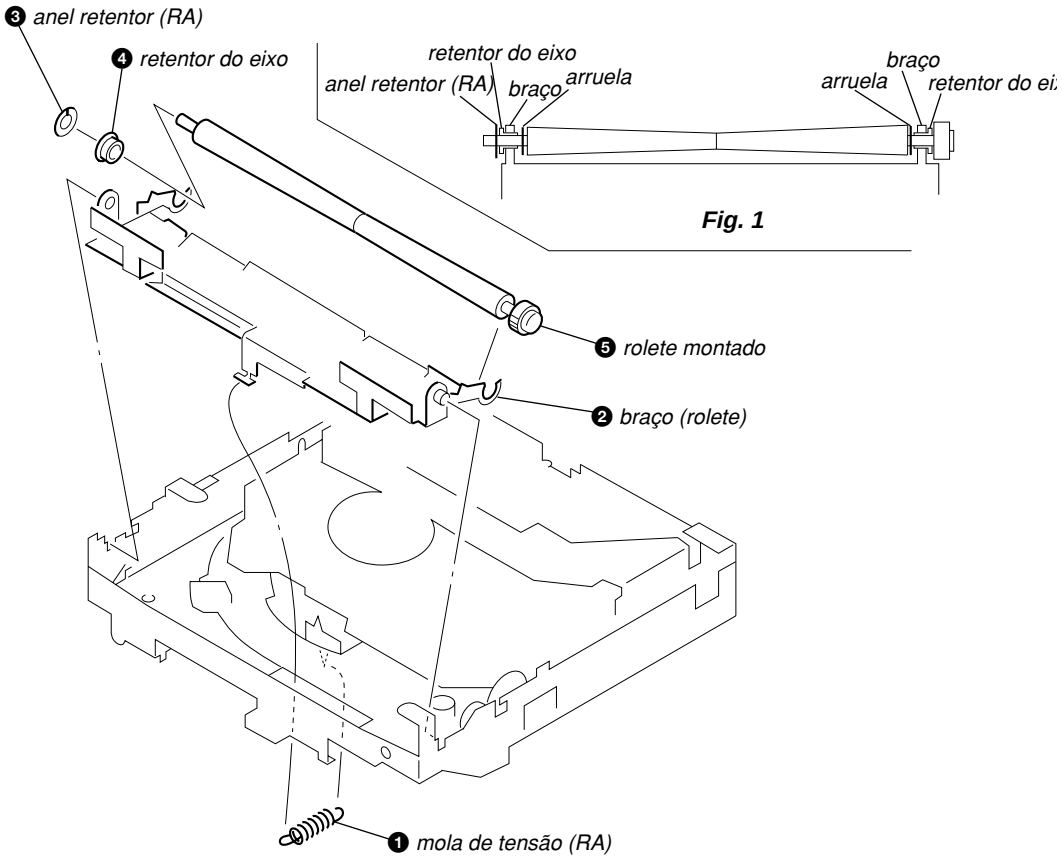
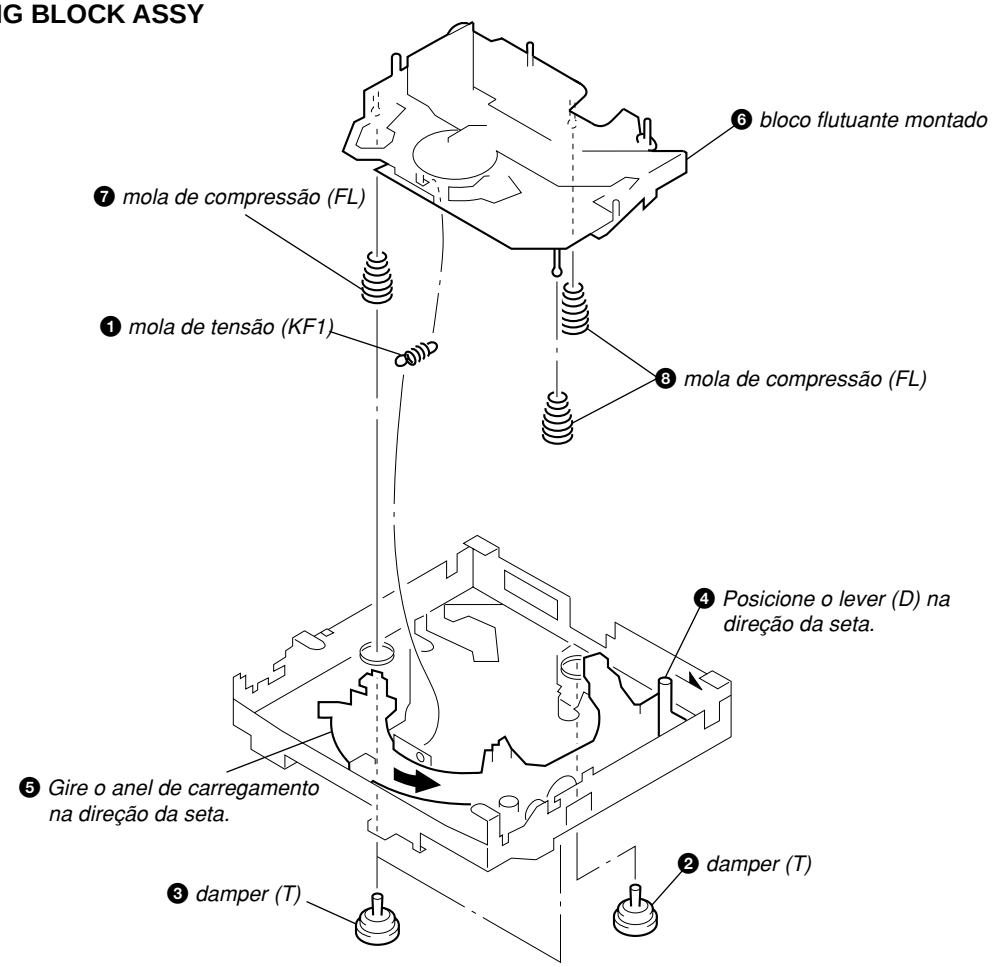
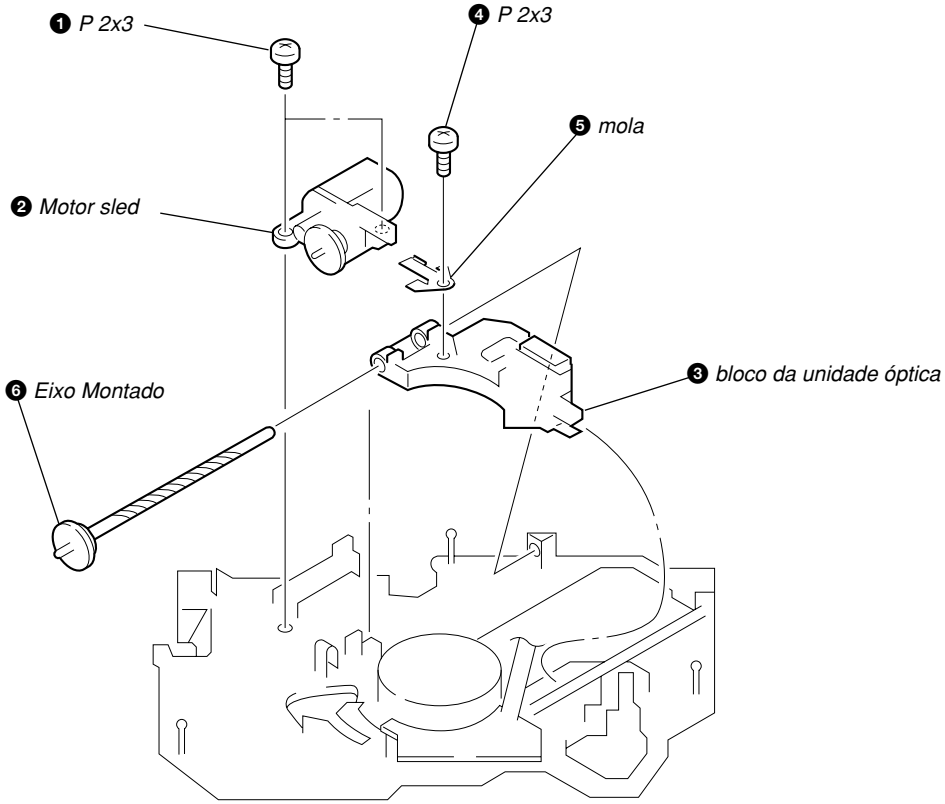


Fig. 1

2-9. FLOATING BLOCK ASSY


❻ bloco flutuante montado
❼ mola de compressão (FL)
❶ mola de tensão (KF1)
❽ mola de compressão (FL)
❹ Posicione o lever (D) na direção da seta.
❺ Gire o anel de carregamento na direção da seta.
❷ damper (T)
❸ damper (T)

2-10. BLOCO DA UNIDADE ÓPTICA



SEÇÃO 3
DIAGRAMAS

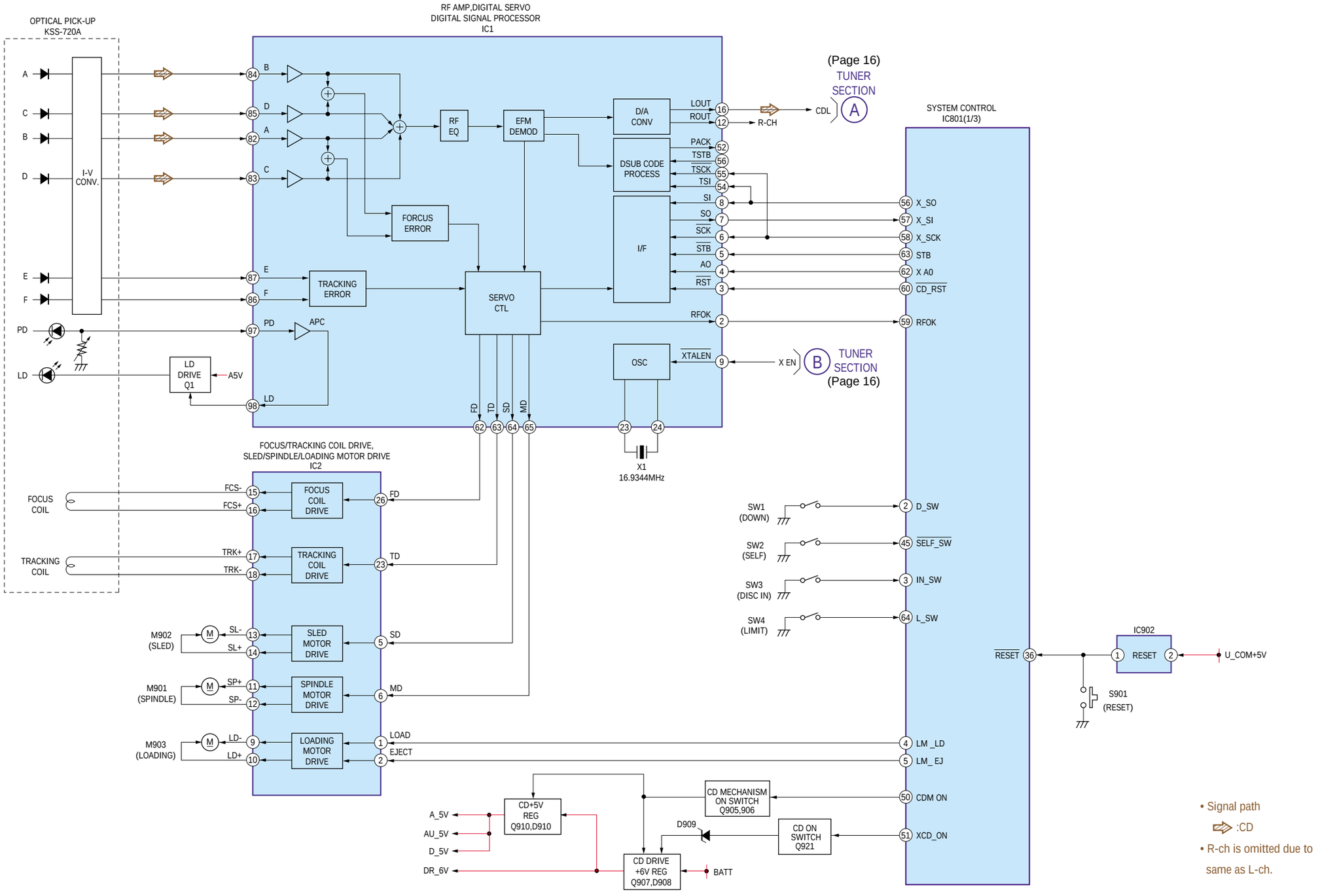
3-1. DESCRIÇÃO DOS PINOS DOS IC'S.

• IC801 µPD780076GK-520-9ET (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Pin Description
1	PH1	I	PH1 detection input (Not used in this set.)
2	D SW	I	Down switch detection input
3	IN SW/PH2	I	Disc in switch detection input
4	LM LD	O	Loading motor drive output (Loading)
5	LM EJ	O	Loading motor drive output (Eject)
6	ATT	O	Line out mute control output
7	$\overline{\text{A ATT}}$	O	Power amplifier mute control output
8	PLL DI	I	PLL IC data input
9	VSSO	—	Ground pin
10	VDDO	—	Power supply pin (+5 V)
11	PLL CLK	O	PLL IC clock output
12	PLL DO	O	PLL IC data output
13	PLL CE	O	PLL IC chip enable output
14	BEEP	O	BEEP output of key beep, caution alarm
15	L V CE	O	Electric volume, LCD chip enable output
16	L V DO	O	Electric volume, LCD data output
17	L V CLK	O	Electric volume, LCD clock output
18	BUS SI	I	BUS interface serial input
19	BUS SO	O	BUS interface serial output
20	BUS CLK	I	BUS interface serial clock input
21	BUS CK GEN	O	BUS interface serial clock output
22	AM ON	O	Tuner AM power supply control output
23	FM ON	O	Tuner FM power supply control output
24	VDD1	—	Power supply pin (+5 V)
25	AVSS	—	Ground pin
26	ST IND	I	FM stereo detection input
27	PH3	I	PH3 detection input (Not used in this set.)
28	S METER	I	S meter signal input
29	KEY0	I	A/D key input 0
30	KEY1	I	A/D key input 1
31	ROTARY (AD)	I	Not used in this set.
32	DST SEL	I	Destination select input (Connect to ground in this set.)
33	TEST	I	Force test mode input
34	AVREF	—	A/D converter power supply pin (+5 V)
35	LCD INH	O	INHIBIT control output of LCD
36	$\overline{\text{RESET}}$	I	Reset input (“L”: reset detection)
37	XT2	O	Sub clock output (32.768 kHz)
38	XT1	I	Sub clock input (32.768 kHz)
39	IC	—	Connect to ground in this set.
40	X2	O	Master clock output (8.38 MHz)
41	X1	I	Master clock input (8.38 MHz)
42	VSS1	—	Ground pin
43	KEY ACK	I	Key acknowledge detection input
44	SIRCS	I	Wireless remote control signal input
45	$\overline{\text{SELF SW}}$	I	Self switch detection input
46	$\overline{\text{BU IN}}$	I	Backup power supply detection input
47	NOSE	I	Front panel attachment detection input
48	ILL ON	O	Illumination power supply control output
49	A REMO	O	External amplifier remote control output
50	CDM ON	O	CD mechanism deck power supply control output
51	XCD ON	O	CD DSP IC 16 MHz X’tal on/off control output

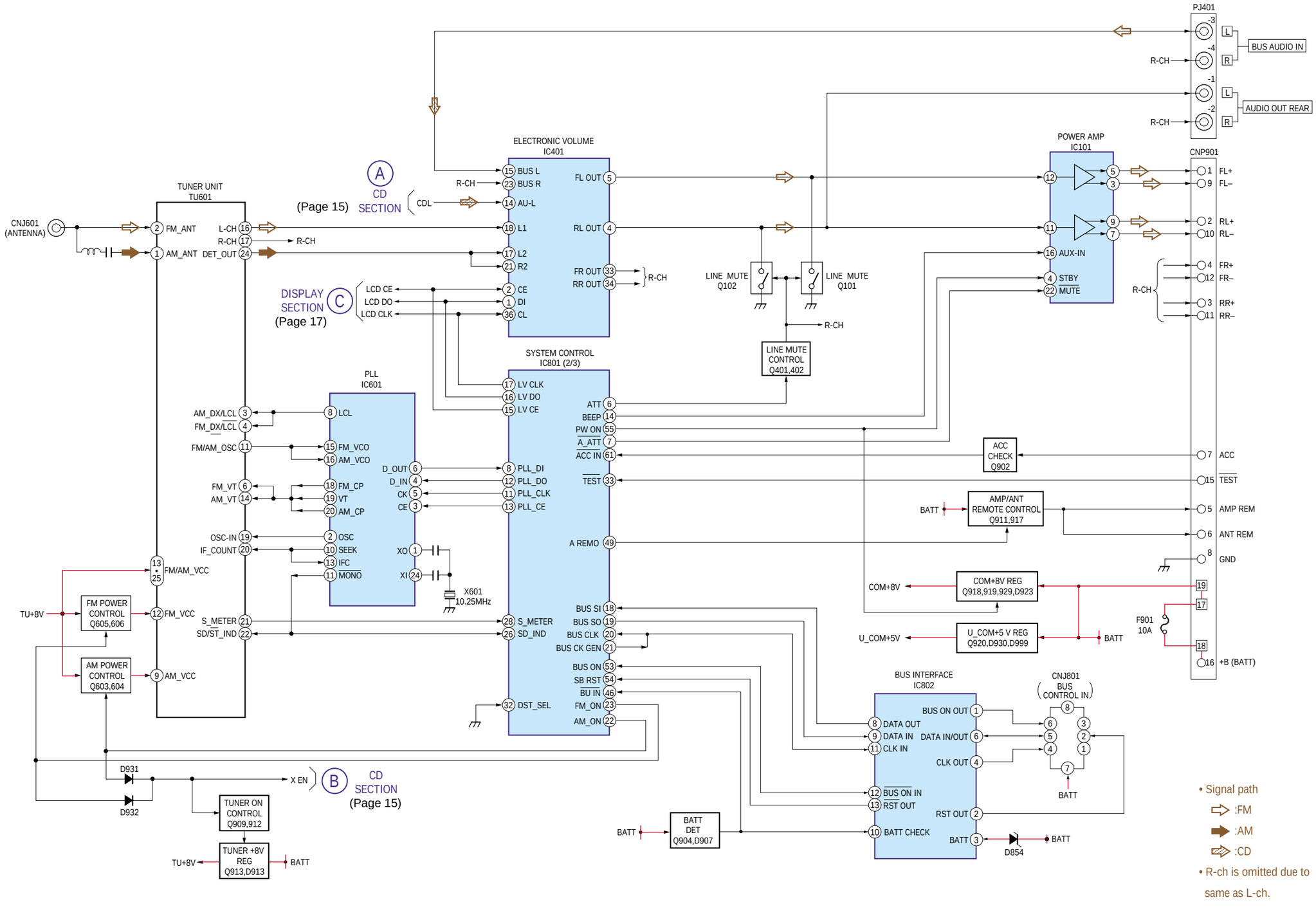
Pin No.	Pin Name	I/O	Pin Description
52	SHIFT	—	Not used in this set.
53	BUS ON	O	Enable output of bus IC
54	SB RST	O	Reset output of bus IC
55	PW ON	O	System power supply control output
56	X SO	O	CD DSP IC serial data output
57	X SI	I	CD DSP IC serial data input
58	X SCK	O	CD DSP IC serial clock output
59	RFOK	I	CD servo IC RFOK signal input
60	$\overline{\text{CD RST}}$	O	CD DSP IC reset control output
61	$\overline{\text{ACC IN}}$	I	Accessory power supply detection input
62	X AO	O	CD servo IC command/parameter discrimination signal output “L”: Command, “H”: Parameter
63	STB	O	CD servo IC data strobe signal output
64	L SW	I	CD sled limit switch detection input

3-2. DIAGRAMA EM BLOCO — SEÇÃO CD —

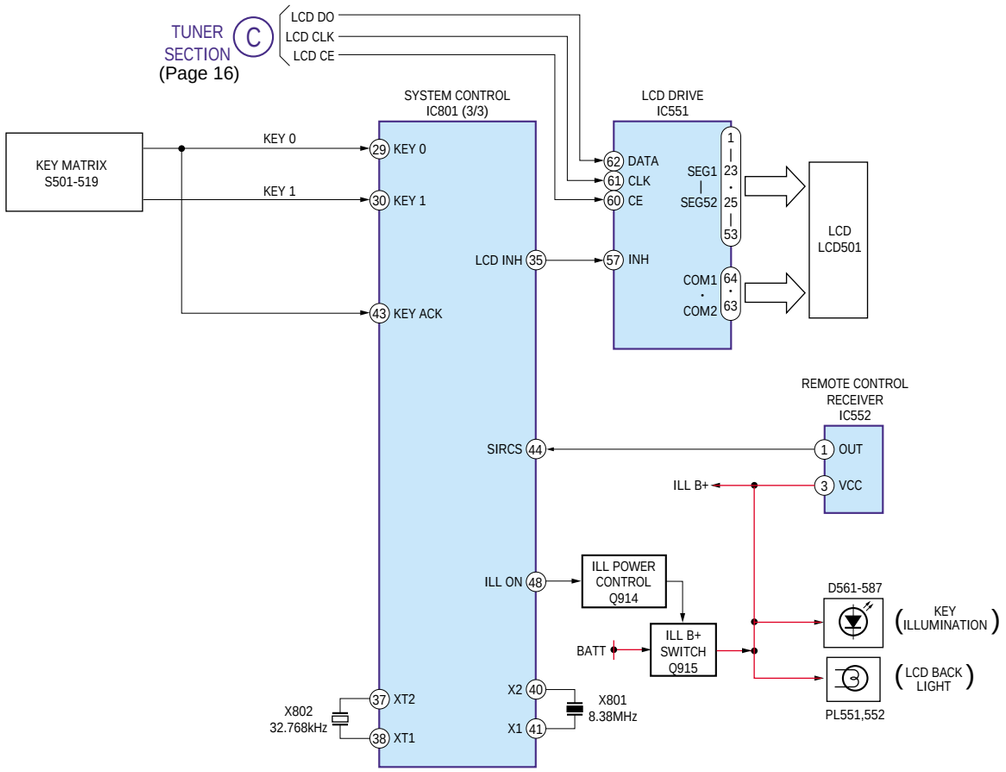


- Signal path
  ⇨ :CD
- R-ch is omitted due to same as L-ch.

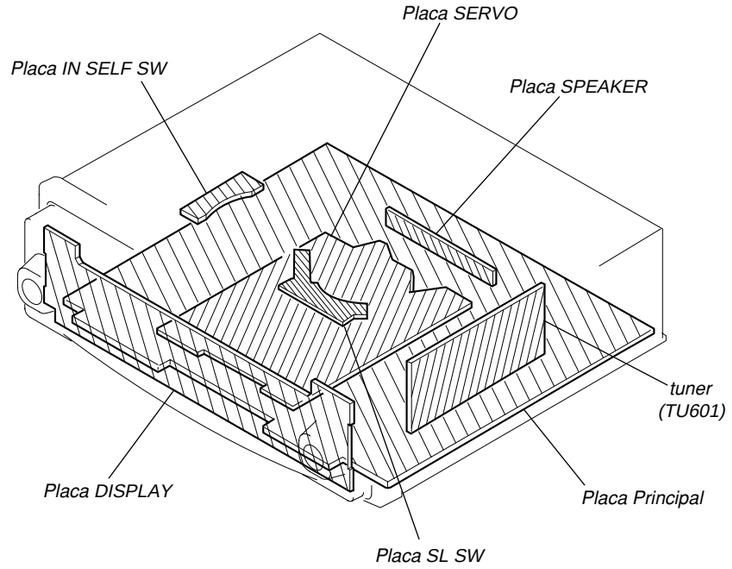
3-3. DIAGRAMA EM BLOCO — SEÇÃO TUNER —



3-4. DIAGRAMA EM BLOCO — SEÇÃO DISPLAY —



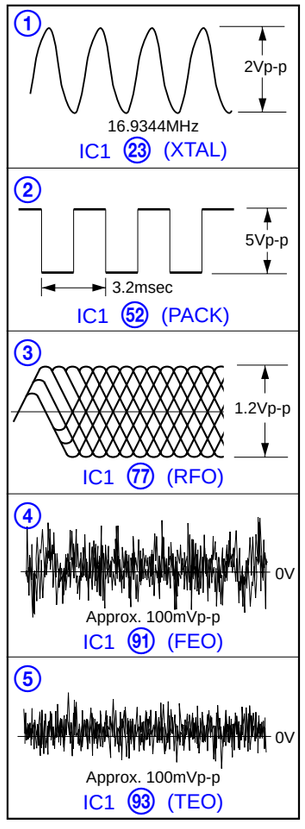
3-5. LOCALIZAÇÃO DAS PLACAS DE CIRCUITO



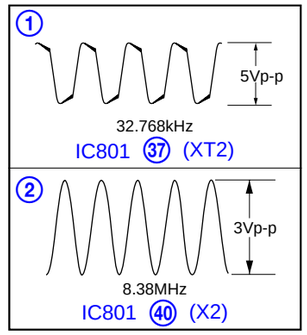
• **Formas de Onda**

— Servo Board —

(MODO: CD PLAY)



— Placa Principal —



3-6. PLACAS DE CIRCUITO IMPRESSO — MECANISMO DO CD — • Veja pág. 16 para localiazção das placas de circuito.

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

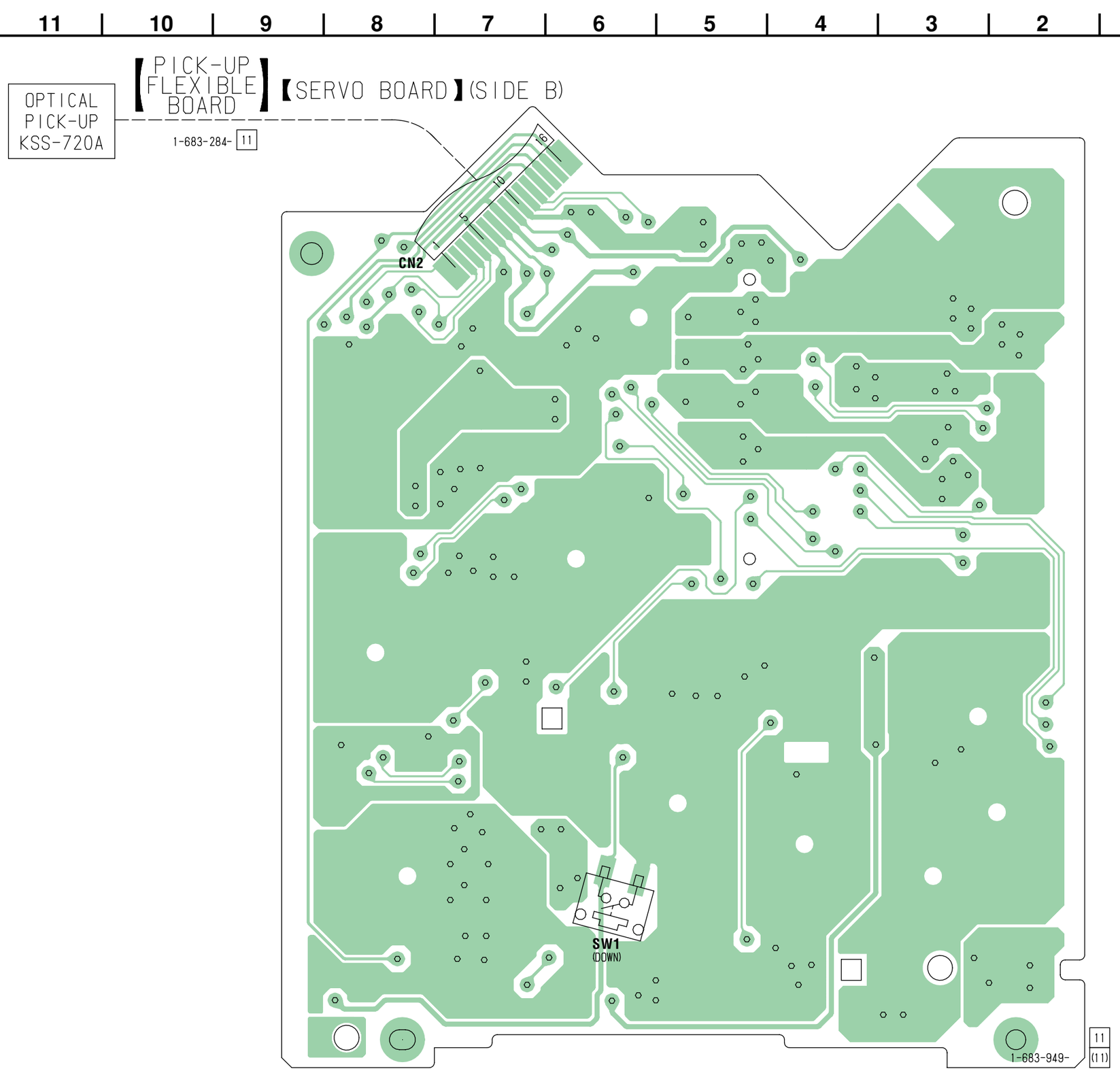
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM
  - ⇨ : CD

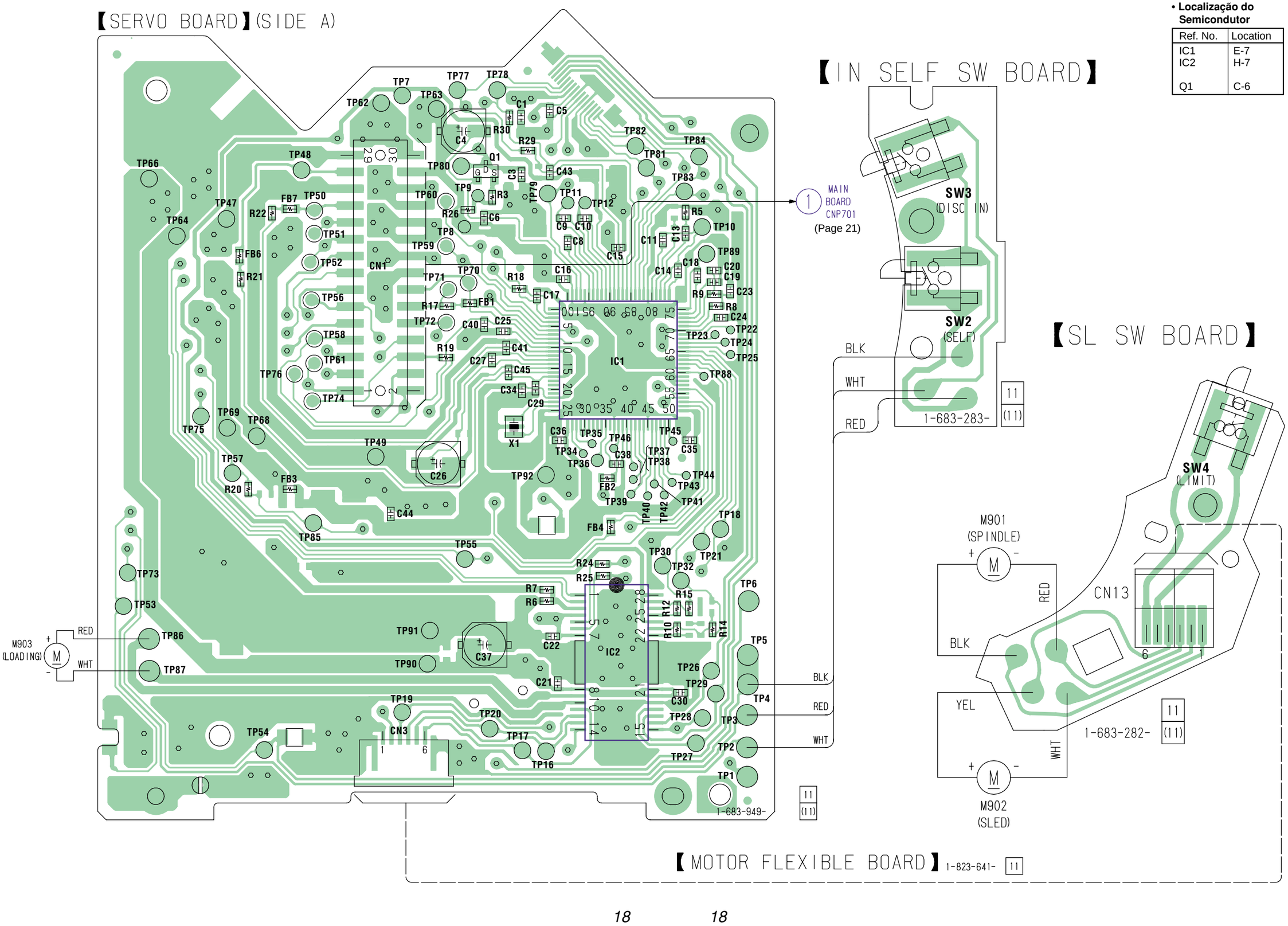
for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.



【SERVO BOARD】(SIDE A)



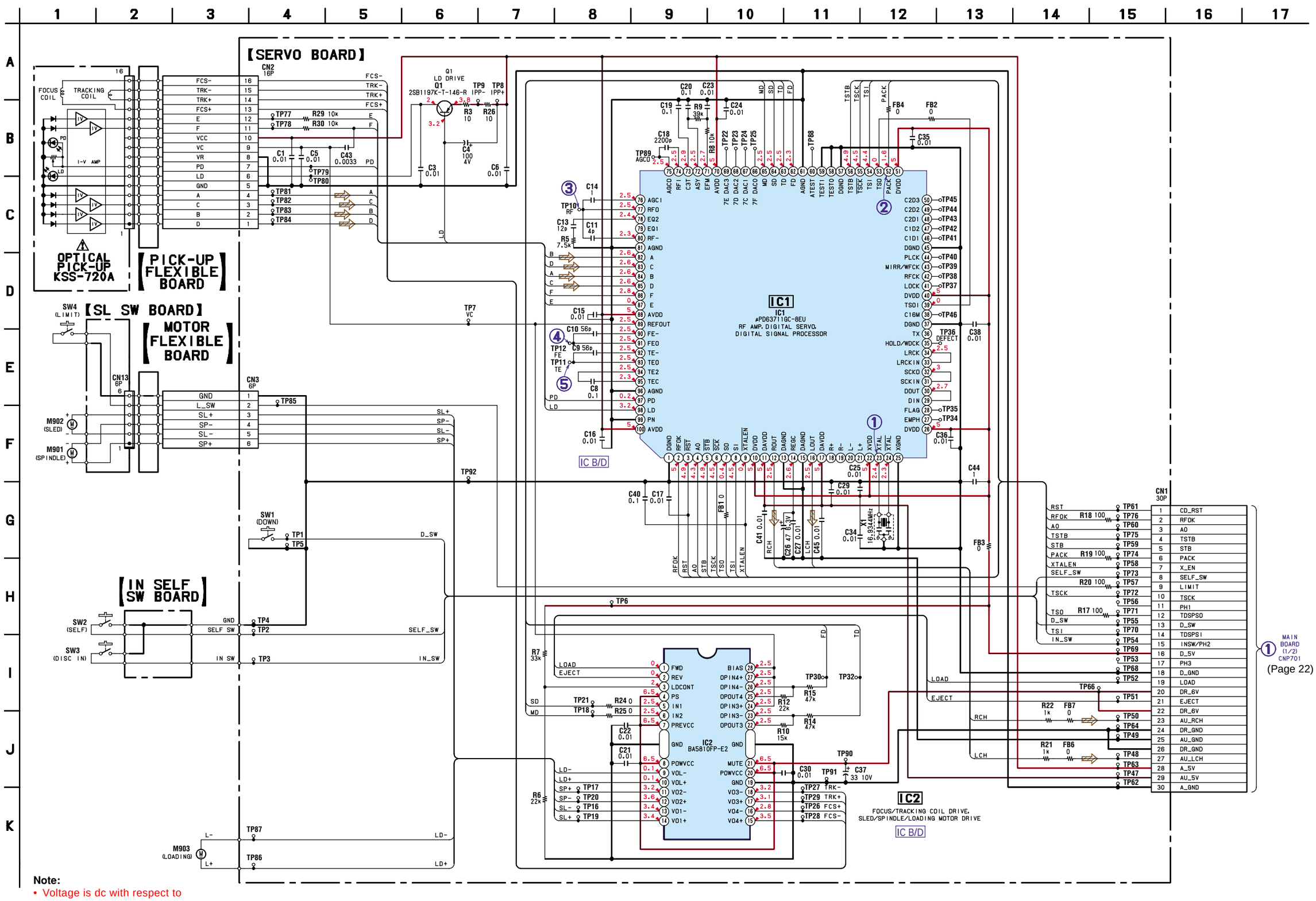
• **Localização do Semicondutor**

Ref. No.	Location
IC1	E-7
IC2	H-7
Q1	C-6

• Veja pág. 16 para formas de onda.

3-7. DIAGRAMA ESQUEMÁTICO — MECANISMO DO CD —

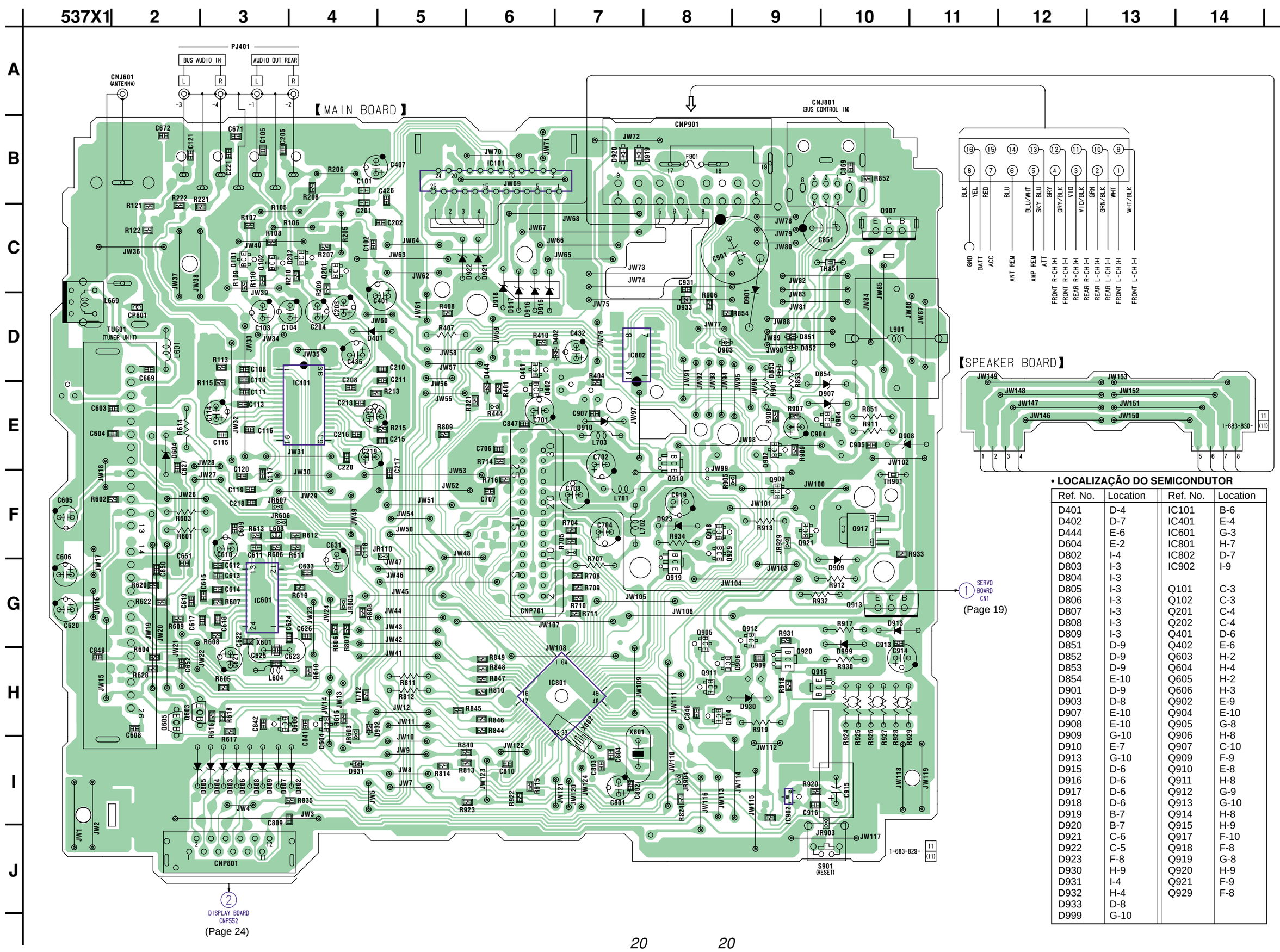
• Veja pág. 25 para diagrama em bloco dos IC's.



Note:

- Voltage is dc with respect to ground under no-signal conditions. no mark : CD PLAY

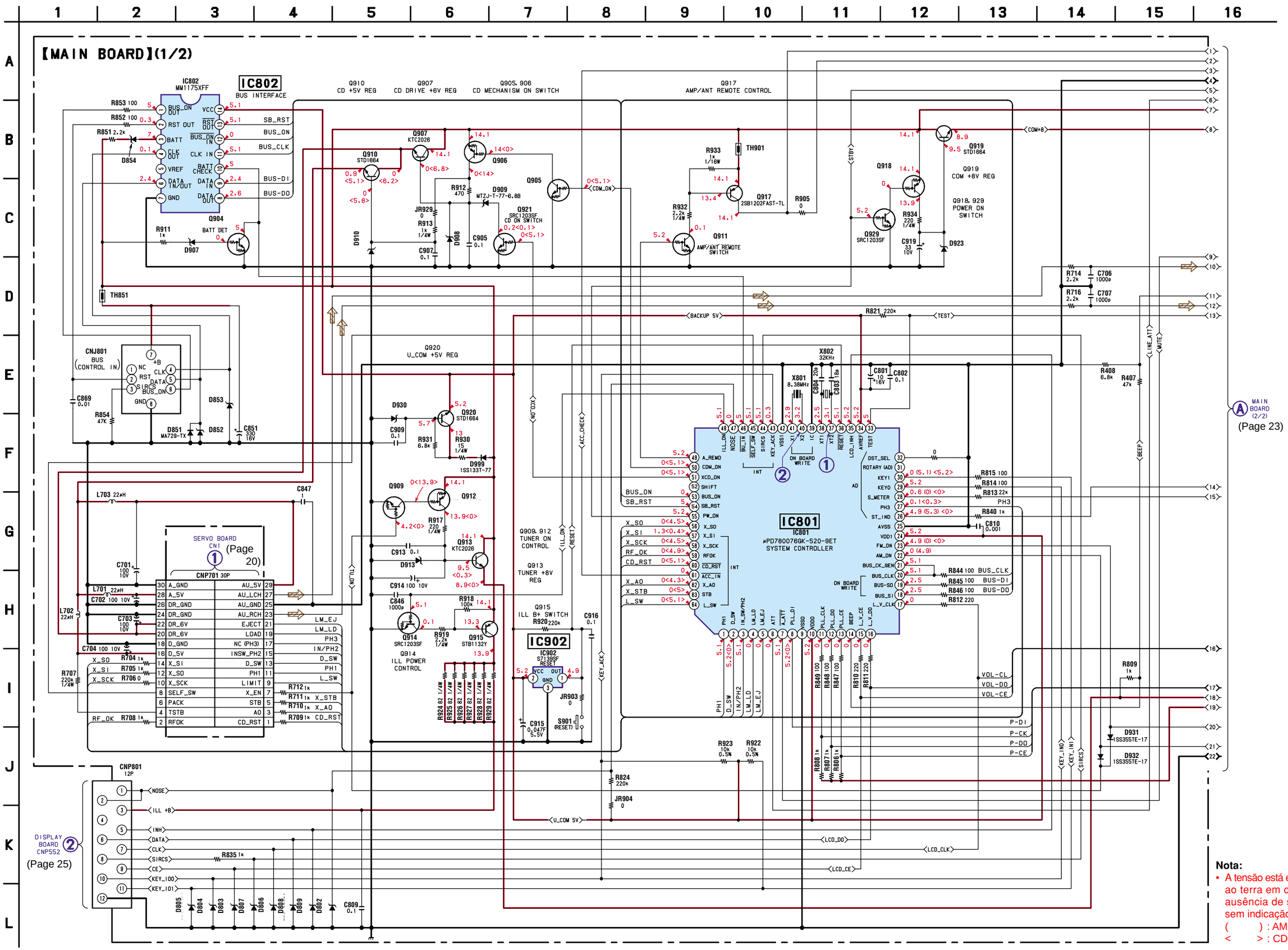
3-8. PLACA DE CIRCUITO IMPRESSO — SEÇÃO PRINCIPAL — • Veja página 16 para localização das placas de circuito.



• LOCALIZAÇÃO DO SEMICONDUTOR

Ref. No.	Location	Ref. No.	Location
D401	D-4	IC101	B-6
D402	D-7	IC401	E-4
D444	E-6	IC601	G-3
D604	E-2	IC801	H-7
D802	I-4	IC802	D-7
D803	I-3	IC902	I-9
D804	I-3		
D805	I-3	Q101	C-3
D806	I-3	Q102	C-3
D807	I-3	Q201	C-4
D808	I-3	Q202	C-4
D809	I-3	Q401	D-6
D851	D-9	Q402	E-6
D852	D-9	Q603	H-2
D853	D-9	Q604	H-4
D854	E-10	Q605	H-2
D901	D-9	Q606	H-3
D903	D-8	Q902	E-9
D907	E-10	Q904	E-10
D908	E-10	Q905	G-8
D909	G-10	Q906	H-8
D910	E-7	Q907	C-10
D913	G-10	Q909	F-9
D915	D-6	Q910	E-8
D916	D-6	Q911	H-8
D917	D-6	Q912	G-9
D918	D-6	Q913	G-10
D919	B-7	Q914	H-8
D920	B-7	Q915	H-9
D921	C-6	Q917	F-10
D922	C-5	Q918	F-8
D923	F-8	Q919	G-8
D930	H-9	Q920	H-9
D931	I-4	Q921	F-9
D932	H-4	Q929	F-8
D933	D-8		
D999	G-10		

3-9. DIAGRAMA ESQUEMÁTICO — SEÇÃO PRINCIPAL (1/2) — • Veja pág. 16 para formas de onda.



Nota:

- A tensão está em DC em relação ao terra em condição de ausência de sinal.
  sem indicação : FM
  ( ) : AM
  < > : CD PLAY

3-10. DIAGRAMA ESQUEMÁTICO — SEÇÃO PRINCIPAL (2/2) — • Veja pág. 25 para diagrama em bloco dos IC's.

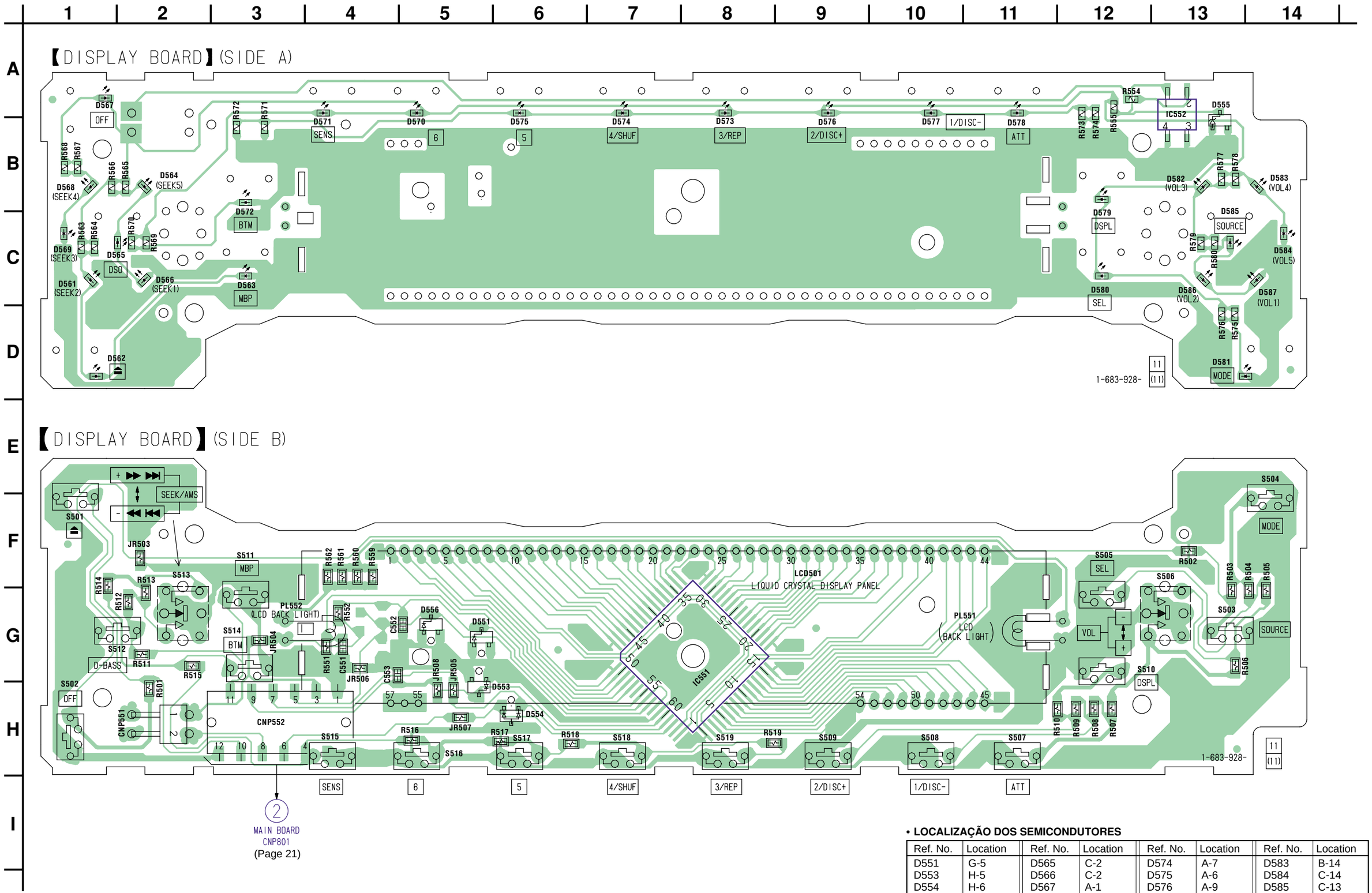
【MAIN BOARD】(2/2)

【SPEAKER BOARD】

Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM
  < > : CD

MAIN BOARD (1/2) (Page22)

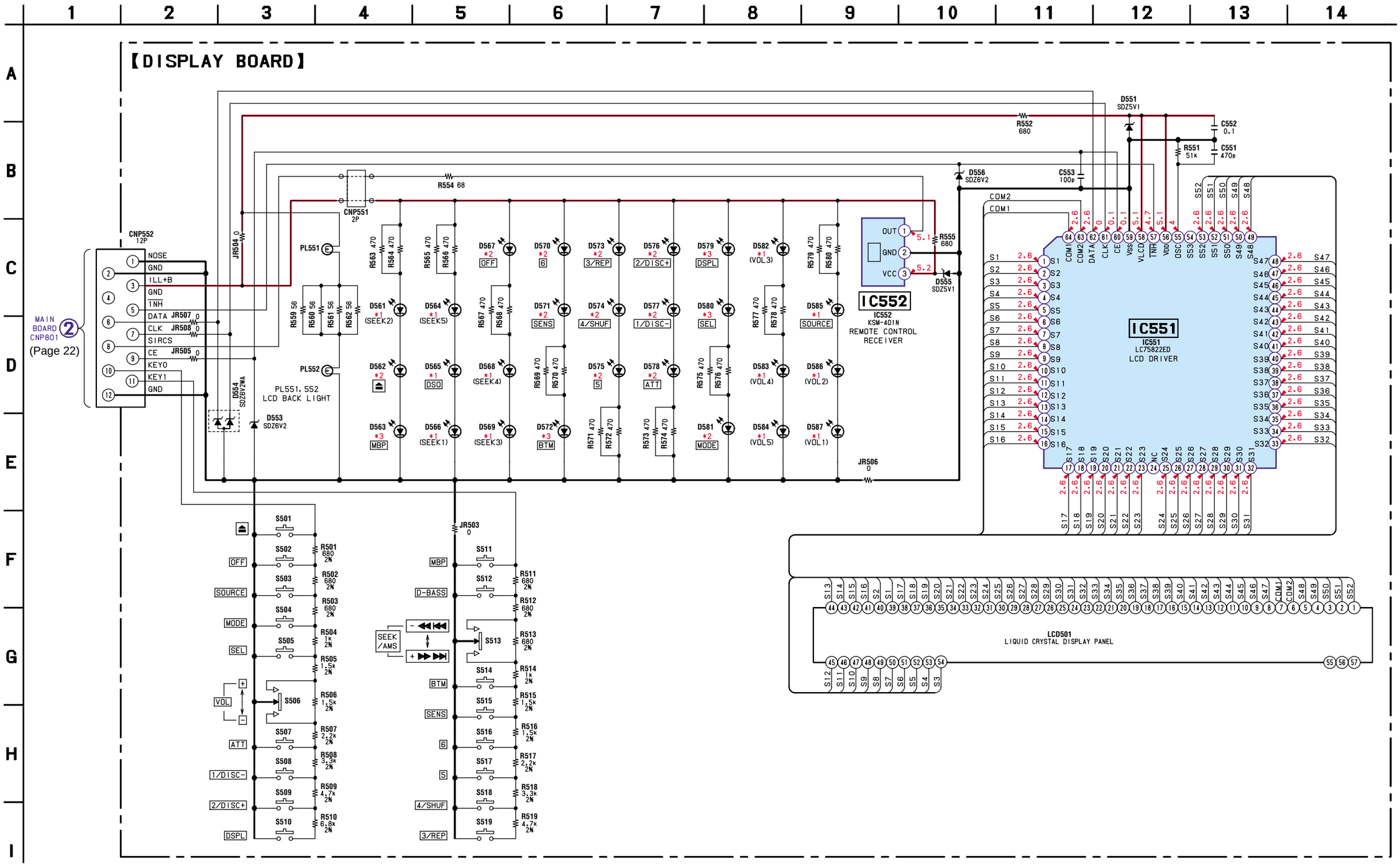
3-11. PLACA DE CIRCUITO IMPRESSO — SEÇÃO DISPLAY — • Veja página 16 para localização das placas de circuito.



• LOCALIZAÇÃO DOS SEMICONDUTORES

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D551	G-5	D565	C-2	D574	A-7	D583	B-14
D553	H-5	D566	C-2	D575	A-6	D584	C-14
D554	H-6	D567	A-1	D576	A-9	D585	C-13
D555	A-13	D568	B-1	D577	A-10	D586	C-13
D556	G-5	D569	C-1	D578	A-11	D587	C-14
D561	C-1	D570	A-5	D579	B-12		
D562	D-1	D571	A-4	D580	C-12	IC551	G-8
D563	C-3	D572	B-3	D581	D-13	IC552	A-13
D564	B-2	D573	A-8	D582	B-13		

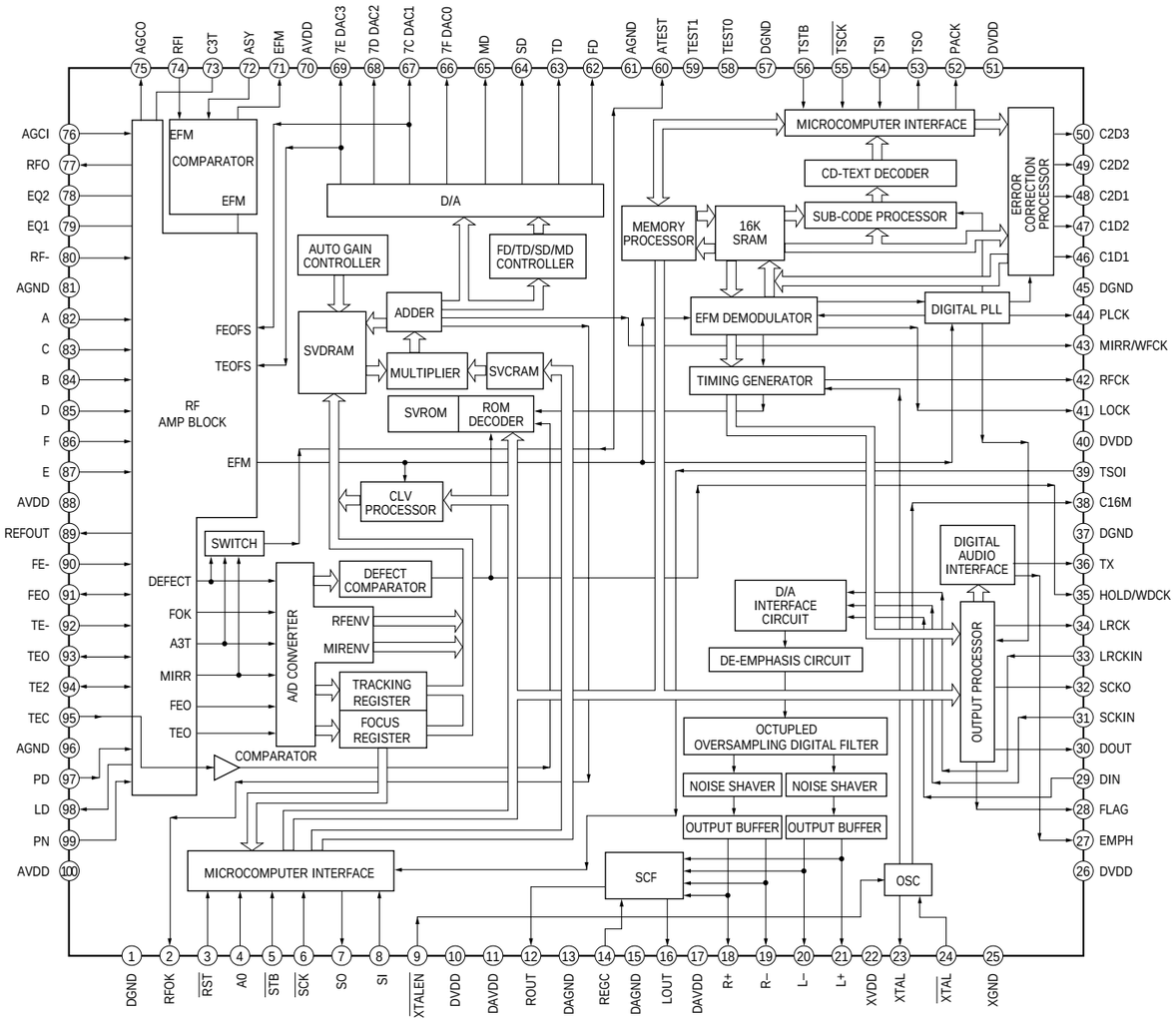
3-12. DIAGRAMA ESQUEMÁTICO — SEÇÃO DISPLAY —



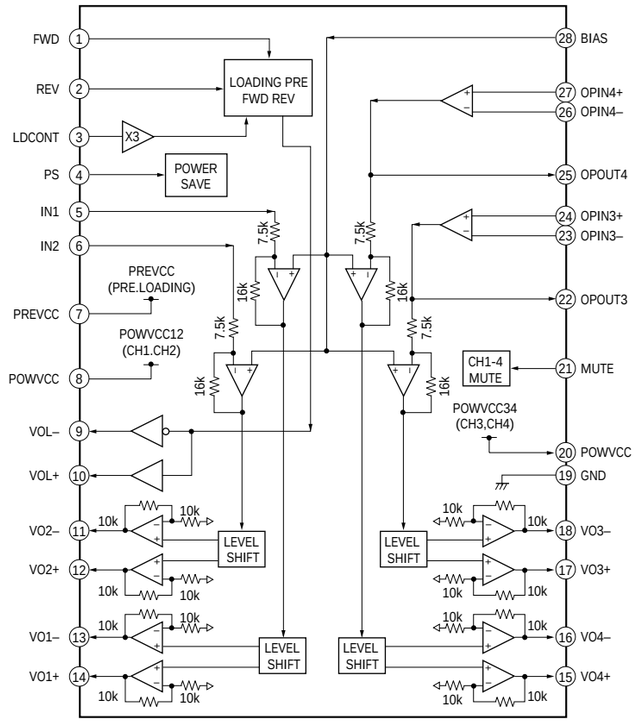
Nota:
- A tensão está em DC em relação ao terra, em condição de ausência de sinal.
  sem indicação : FM

• DIAGRAMA EM BLOCO DOS IC's

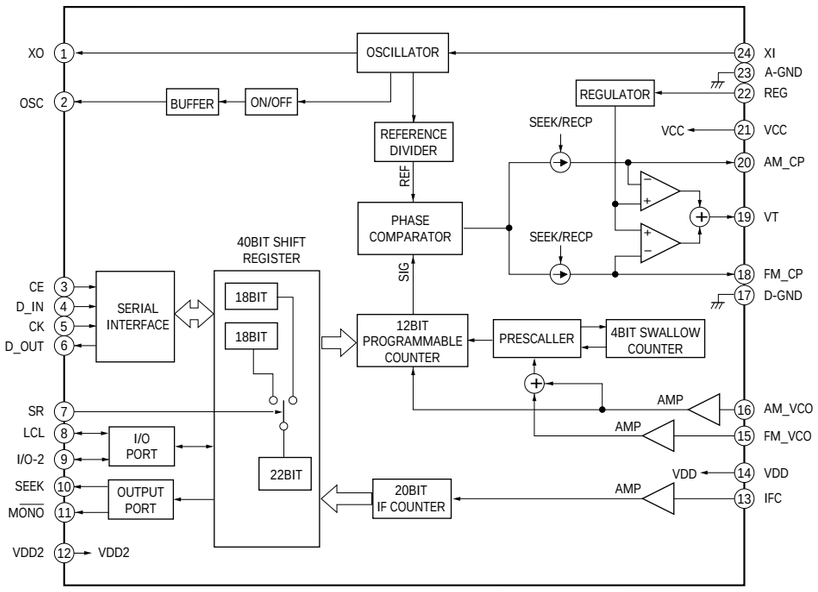
IC1 µPD63711GC-8EU



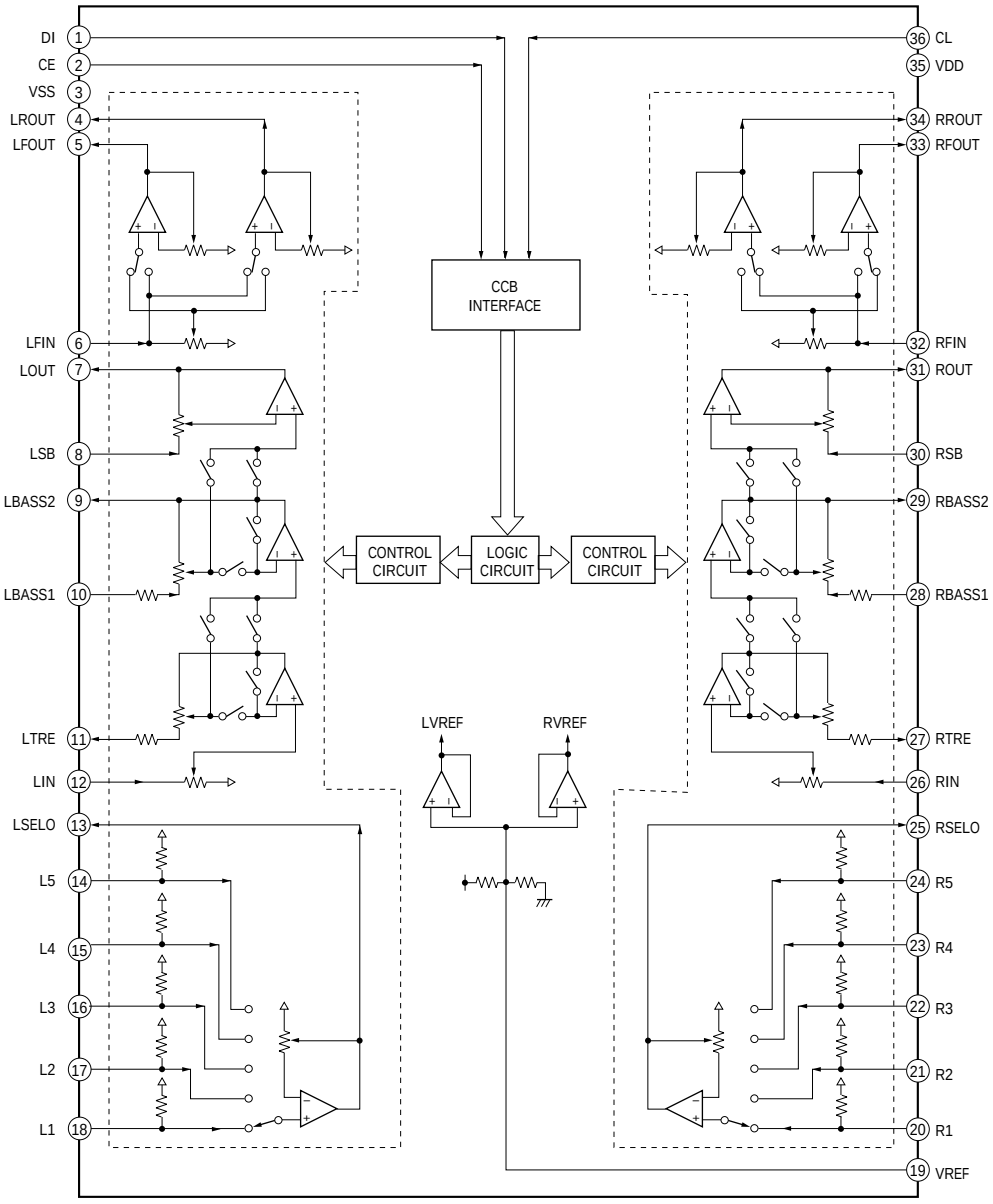
IC2 BA5810FP-E2



IC601 TB2118F-EL-S



IC401 LC75421M-TLM-E

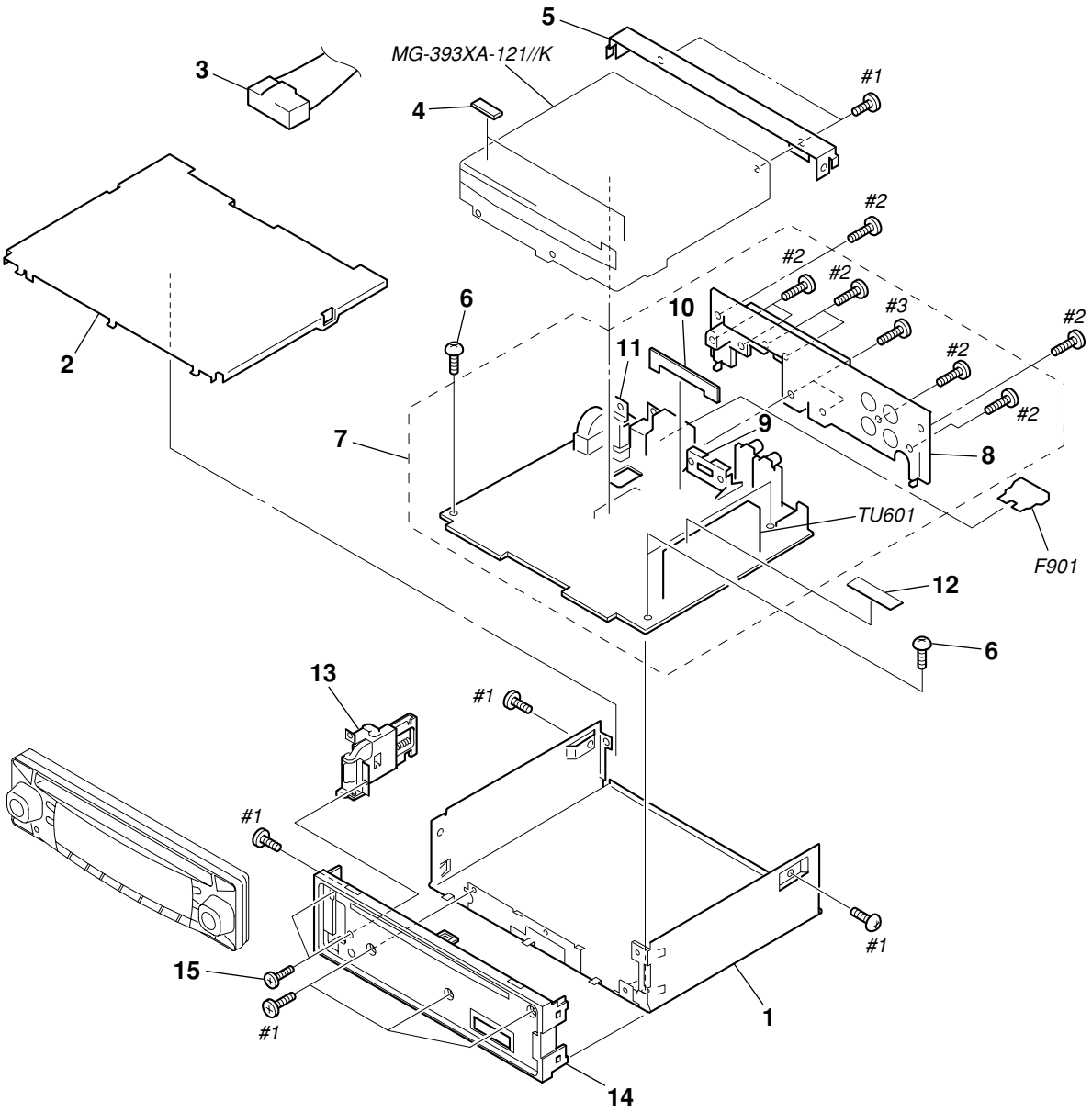


SEÇÃO 4
VISTAS EXPLODIDAS

NOTE:
- As partes mecânicas sem número de referência nas vistas explodidas não são fornecidas.
- Itens com a marca "*" não são mantidos em estoque por serem raramente solicitados. Atrasos podem ser evitados antecipando-se os pedidos para estes itens.
- -XX e -X indicam peça padrão e podem apresentar algumas diferenças daquelas originalmente usadas no aparelho.
- Cor Indicativa de Peças:
  Exemplo:
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Cor da Peça ↑ Cor do Gabinete
- os acessórios estão listados no fim da lista de peças elétricas.

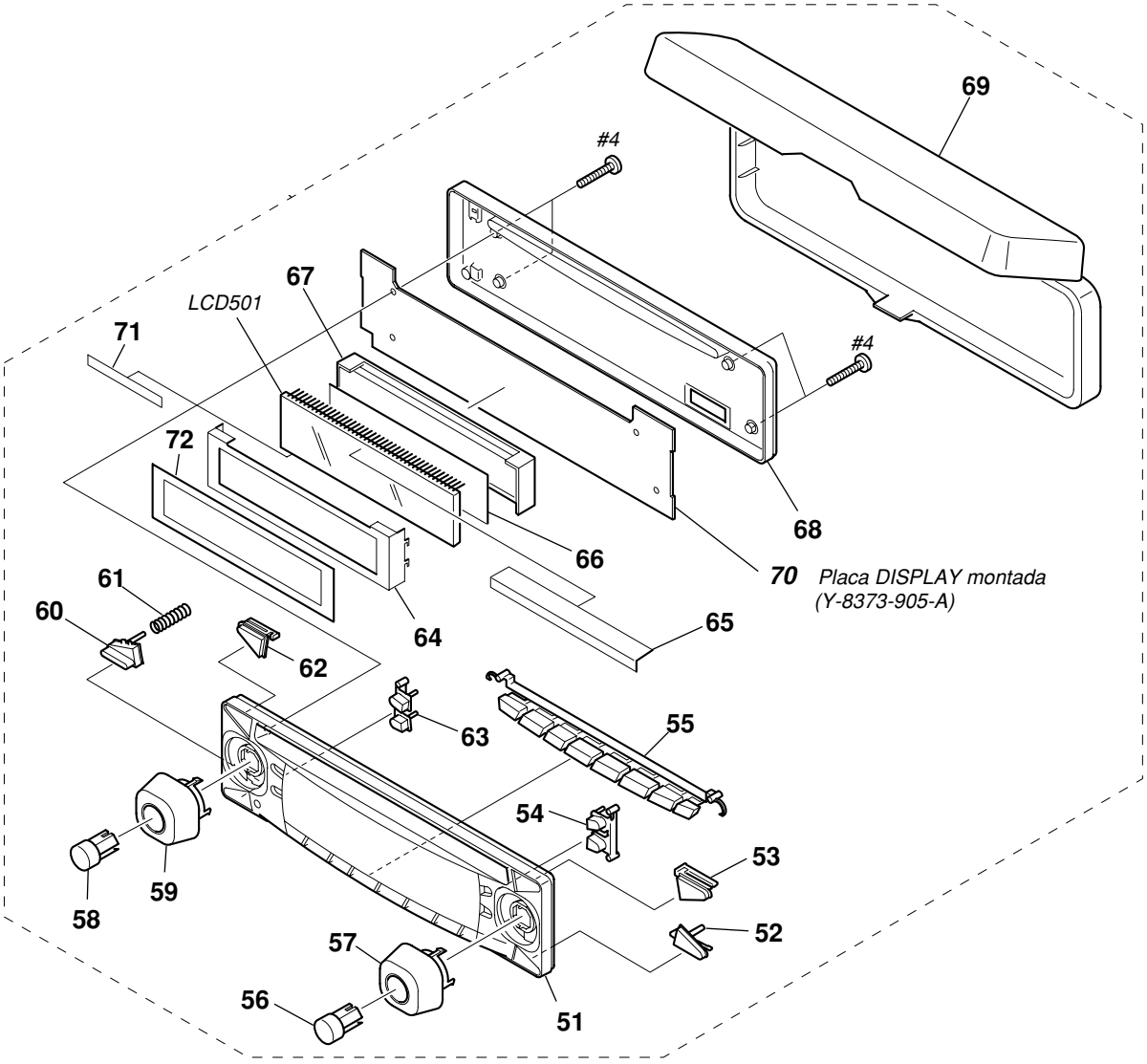
Os componentes identificados com a marca ⚠ são críticos para a segurança. Somente os substitua por peças numericamente identificadas nesse manual.

4-1. CHASSIS



Ref. No.	Part No.	Description	Remark
* 1	3-224-612-02	CHASSIS (CD)	
2	3-224-309-32	TAMPA SUPERIOR	
3	1-757-974-11	CABO CONECTOR	
* 4	3-024-285-11	CUSHION (RUBBER)	
* 5	3-041-173-12	SUPORTE (CD)	
6	3-922-535-11	SCREW (+BTT)	
7	Y-8373-390-A	PLACA PRINCIPAL MONTADA	
8	3-236-922-01	DISSIPADOR	
* 9	3-019-565-01	SUPORTE (IC)	
10	1-683-830-11	SPEAKER BOARD	
11	3-041-261-11	SUPORTE (TR)	
* 12	3-240-350-01	FOLHA METÁLICA (E)	
13	X-3380-594-3	LOCK ASSY (S)	
14	X-3381-269-1	SUB PAINEL	
15	3-231-472-01	SCREW (+B 2X4)	
F901	1-532-877-11	FUSÍVEL TIPO LÂMINA 10A	
TU601	A-3282-064-A	TUNER UNIT (TUX-010)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-795-09	SCREW +PTT 2.6X12 (S)	

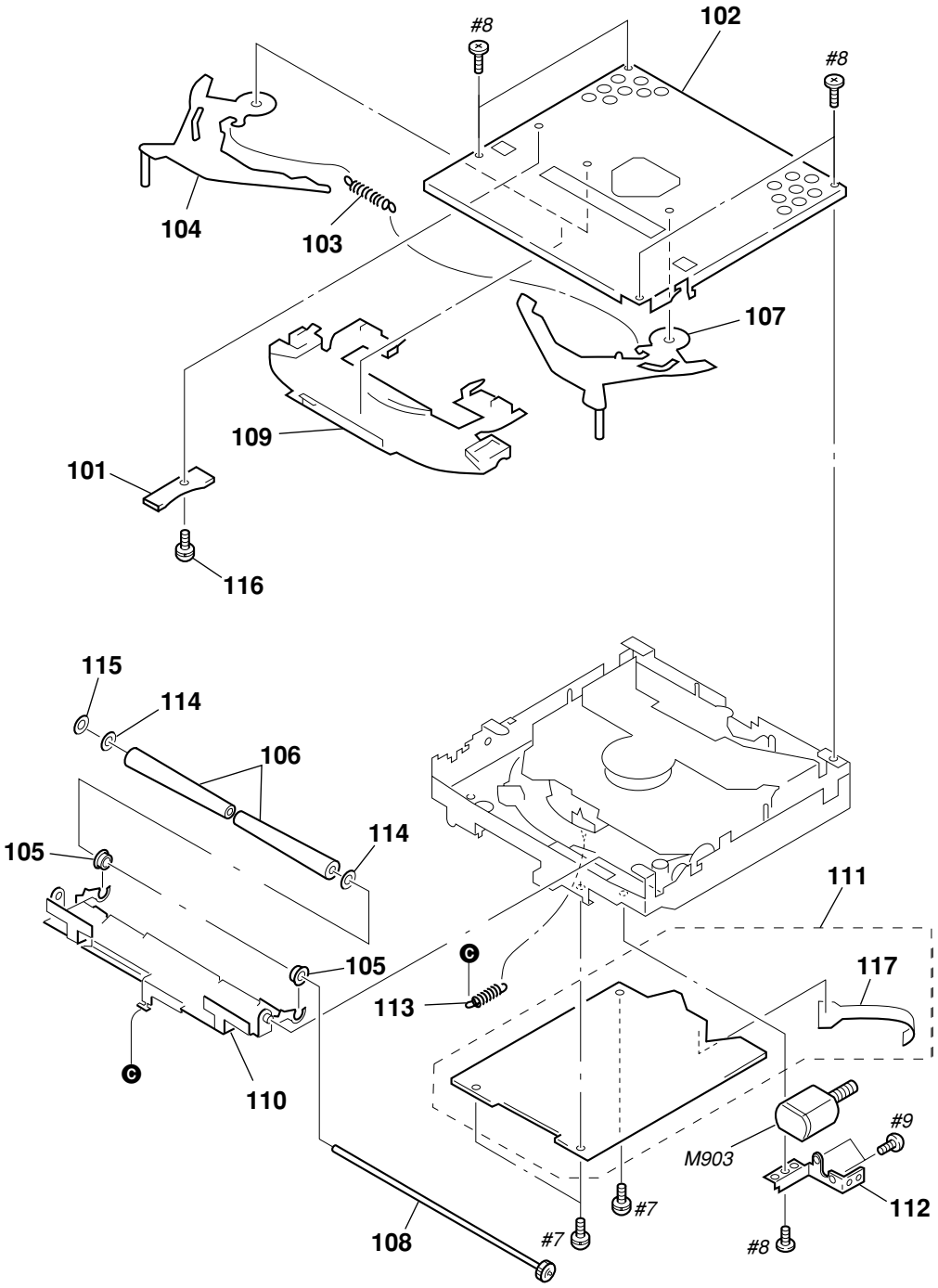
4-2. PAINEL FRONTAL



Ref. No.	Part No.	Description	Remark
51	3-236-901-01	PAINEL FRONTAL	
51-1	3-241-900-01	VISOR INDICADOR	
51-2	X-3381-642-1	ADESIVO DO VISOR	
52	3-236-909-01	BUTTON (OFF)	
53	3-236-912-01	BUTTON (EJECT)	
54	3-236-908-01	BUTTON (MBP)	
55	3-236-910-01	BUTTON (1-6)	
56	3-242-812-01	BUTTON (D-BASS)	
57	X-3381-356-1	BOTÃO SEEK	
58	3-242-811-01	BUTTON (SOURCE)	
59	X-3381-355-2	BOTÃO VOL	
60	3-236-911-01	BUTTON (RELEASE)	
61	3-240-348-01	SPRING (RELEASE)	
62	3-236-907-01	BUTTON (MODE)	

Ref. No.	Part No.	Description	Remark
63	3-236-906-01	BUTTON (SEL)	
64	3-236-921-01	MOLDURA DO TERRA (LCD)	
* 65	3-229-751-01	FOLHA LCD UP	
66	3-236-920-01	FOLHA DIFUSORA (LCD)	
67	X-3381-357-1	SUPORTE DO LCD	
68	3-236-902-01	TAMPA TRASEIRA DO PAINEL FRONTAL	
69	3-019-685-22	ESTOJO	
70	Y-8373-905-A	PLACA DISPLAY MONTADA	
* 71	3-227-293-01	FOLHA (LCD)	
72	3-236-926-01	CALÇO (LCD)	
LCD501	1-804-626-11	DISPLAY DE CRISTAL LÍQUIDO	
#4	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

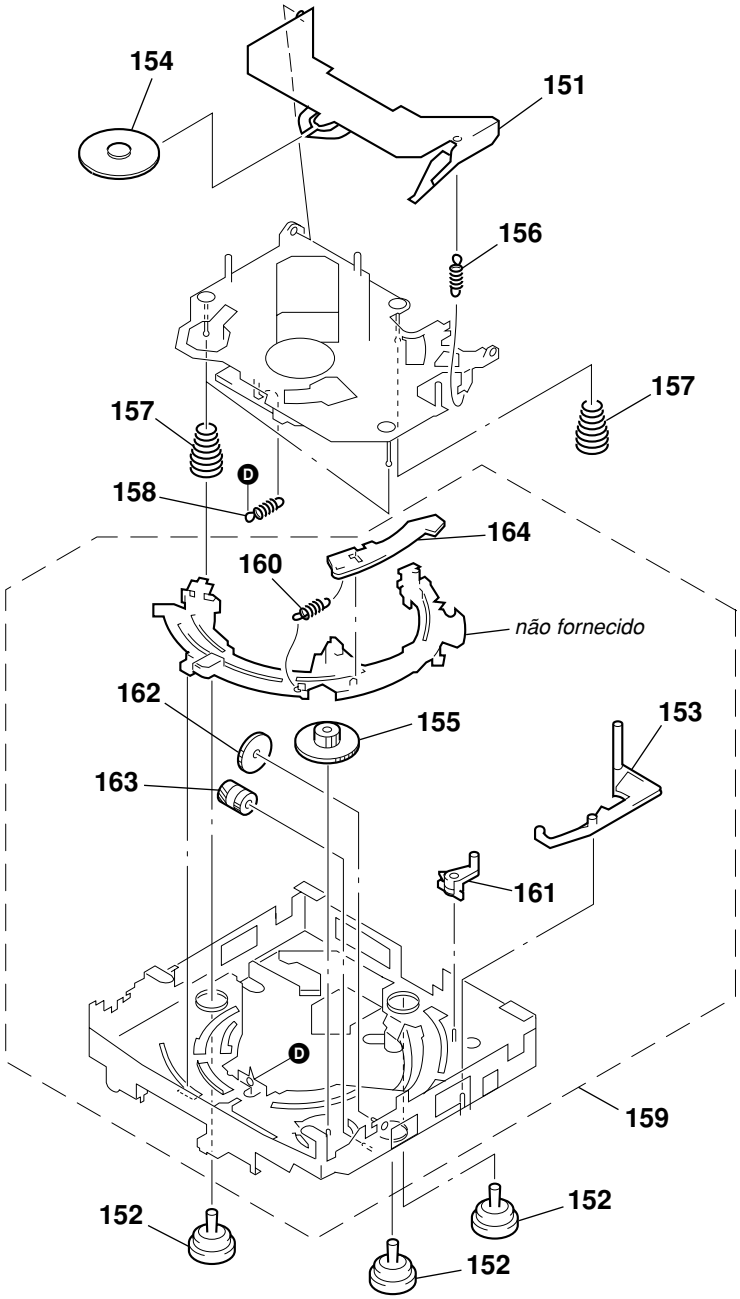
4-3. MECANISMO DO CD (1)
(MG-393XA-121//K) - (A-3220-852-A)



Ref. No.	Part No.	Description	Remark
101	1-683-283-11	IN SELF SW BOARD	
102	3-040-039-02	CHASSIS (T)	
103	3-040-038-01	SPRING (LR), TENSION	
104	3-040-050-01	LEVER (L)	
105	3-040-022-01	RETAINER (ROLLER), SHAFT	
106	3-040-044-01	ROLLER (S)	
107	3-040-067-01	LEVER (R)	
108	A-3301-980-A	SHAFT ROLLER ASSY	
109	3-040-037-01	GUIDE (DISC)	
110	3-040-040-02	ARM (ROLLER)	
111	A-3283-233-A	SERVO BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remark
112	3-221-779-01	BRACKET (MOTOR)	
113	3-040-034-01	SPRING (RA), TENSION	
114	3-040-042-01	WASHER	
115	3-043-880-01	RING (RA), RETAINING	
116	3-044-206-11	SCREW, SPECIAL	
117	1-683-284-11	FLEXIBLE BOARD	
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)	
#7	7-628-253-00	SCREW, SPECIAL	
#8	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#9	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE3	

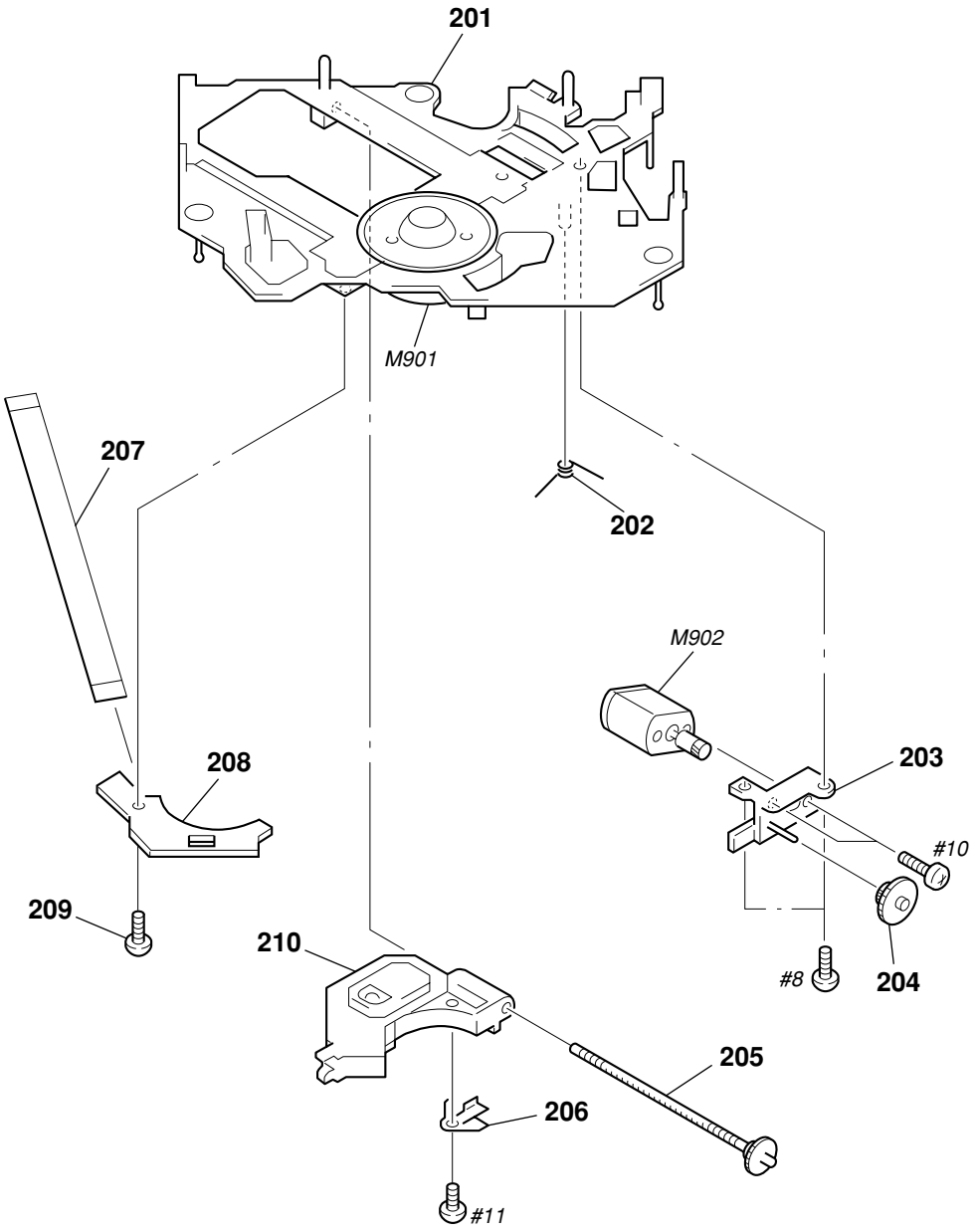
4-4. MECANISMO DO CD (2)
(MG-393XA-121//K) - (A-3220-852-A)



Ref. No.	Part No.	Description	Remark
151	3-040-025-01	ARM, CHUCKING	
152	3-040-031-01	DAMPER (T)	
153	3-040-056-01	LEVER (D)	
154	3-040-024-01	RETAINER (DISC)	
155	3-040-054-01	WHEEL (LW), WORM	
156	3-040-026-01	SPRING (CH), TENSION	
157	3-040-032-01	SPRING (FL), COMPRESSION	

Ref. No.	Part No.	Description	Remark
158	3-040-033-01	SPRING (KF1), TENSION	
159	A-3307-422-A	CHASSIS (M) COMPLETE ASSY	
160	3-040-059-01	SPRING (TR), TENSION	
161	3-040-057-01	LEVER (LOCK)	
162	3-040-058-01	GEAR (MDL)	
163	3-040-052-01	WHEEL (U), WORM	
164	3-040-051-02	LEVER (TR)	

4-5. MECANISMO DO CD (3)
(MG-393XA-121//K)- (A-3220-852-A)



Os componentes identificados com a marca ⚠ são críticos para a segurança. Somente os substitua por peças numericamente identificadas nesse manual.

Ref. No.	Part No.	Description	Remark
201	X-3378-480-1	CHASSIS (OP) ASSY (including M901)	
202	3-040-029-01	SPRING (SL), TORSION	
203	3-040-045-01	BASE (DRIVING)	
204	3-040-194-01	GEAR (MIDWAY)	
205	A-3301-983-A	SHAFT (FEED) ASSY	
206	3-040-030-01	SPRING (FEED), PLATE	
207	1-823-641-11	CABLE, FLEXIBLE FLAT (6 CORE)	
208	1-683-282-11	SL SW BOARD	
209	3-909-607-01	SCREW	
⚠210	8-820-103-11	PICK-UP, OPTICAL KSS-720A/C-RP	
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)	
#8	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE3	
#10	7-627-850-28	SCREW, PRECISION +P 1.4X3	
#11	7-685-780-01	SCREW +PTT 2X3 (S)	

SEÇÃO 5
LISTA DE PEÇAS ELÉTRICAS

DISPLAY

NOTA:

- Devido a padronização, algumas peças podem ser diferentes daquelas especificadas nos diagranas esquemáticos ou mesmo daquelas utilizadas no aparelho.
- -XX e -X indicam peça padrão e podem apresentar diferenças daquelas originalmente usadas nos aparelhos.
- RESISTORES
  Todos os resistores
  METAL:resistor de Metal-film.
  METAL OXIDE: resistor Metal oxide-film.
  F:anti-chama
- Itens com a marca "*" não são mantidos em estoque por serem raramente solicitados. Evite atrasos antecipando os pedidos para estes itens.
- SEMICONDUTORES
  Em cada caso, u : µ, por exemplo:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORES
  uF : µF
- INDUTORES
  uH : µH

Os componentes identificados com a marca ⚠ são críticos para segurança. Somente os substitua por peças numericamente identificadas nesse manual.

Quando pedir peças pelo n.º de referência por favor indique também o nome da placa.

Ref. No.	Part No.	Description			Remark
	Y-8373-905-A	PLACA DISPLAY			
		**********			
*	3-227-293-01	FOLHA (LCD)			
*	3-229-751-01	FOLHA (LCD.UP)			
	3-236-920-01	FOLHA DIFUSORA (LCD)			
	3-236-921-01	MOLDURA DO TERRA (LCD)			
	X-3381-357-1	SUPORTE (LCD)			
		< CAPACITOR >			
C551	1-164-315-11	CERAMIC CHIP	470PF	5% 50V	
C552	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C553	1-162-927-11	CERAMIC CHIP	100PF	5% 50V	
		< CONNECTOR >			
* CNP551	1-779-131-11	PIN, CONNECTOR 2P			
CNP552	1-794-312-21	PIN, CONNECTOR 12P			
		< DIODE >			
D551	8-719-073-15	DIODE SDZ5V1			
D553	8-719-067-70	DIODE SDZ6V2-6,2			
D554	8-719-068-68	DIODE SDZ6V2WA			
D555	8-719-073-15	DIODE SDZ5V1			
D556	8-719-067-70	DIODE SDZ6V2-6,2			
D561	8-719-053-09	LED SML-310VTT86 (SEEK2)			
D562	8-719-053-09	LED SML-310VTT86 (⏏)			
D563	8-719-053-08	LED SML-310DTT86 (MBP)			
D564	8-719-053-09	LED SML-310VTT86 (SEEK5)			
D565	8-719-053-09	LED SML-310VTT86 (DSO)			
D566	8-719-053-09	LED SML-310VTT86 (SEEK1)			
D567	8-719-053-09	LED SML-310VTT86 (OFF)			
D568	8-719-053-09	LED SML-310VTT86 (SEEK4)			
D569	8-719-053-09	LED SML-310VTT86 (SEEK3)			
D570	8-719-053-09	LED SML-310VTT86 (6)			
D571	8-719-053-09	LED SML-310VTT86 (SENS)			
D572	8-719-053-08	LED SML-310DTT86 (BTM)			
D573	8-719-053-09	LED SML-310VTT86 (3/REP)			
D574	8-719-053-09	LED SML-310VTT86 (4/SHUF)			
D575	8-719-053-09	LED SML-310VTT86 (5)			
D576	8-719-053-09	LED SML-310VTT86 (2/DISC +)			
D577	8-719-053-09	LED SML-310VTT86 (1/DISC –)			
D578	8-719-053-09	LED SML-310VTT86 (ATT)			
D579	8-719-053-08	LED SML-310DTT86 (DSPL)			
D580	8-719-053-08	LED SML-310DTT86 (SEL)			
D581	8-719-053-09	LED SML-310VTT86 (MODE)			
D582	8-719-053-09	LED SML-310VTT86 (VOL3)			
D583	8-719-053-09	LED SML-310VTT86 (VOL4)			
D584	8-719-053-09	LED SML-310VTT86 (VOL5)			
D585	8-719-053-09	LED SML-310VTT86 (SOURCE)			
D586	8-719-053-09	LED SML-310VTT86 (VOL2)			

DISPLAY IN SELF SW

Ref. No.	Part No.	Description			Remark
D587	8-719-053-09	LED SML-310VTT86 (VOL1)			
		< IC >			
IC551	8-759-369-90	IC LC75822ED			
IC552	8-749-017-35	IC KSM-401N			
		< JUMPER RESISTOR >			
JR503	1-216-864-11	METAL CHIP	0	5%	1/16W
JR504	1-216-864-11	METAL CHIP	0	5%	1/16W
JR505	1-216-864-11	METAL CHIP	0	5%	1/16W
JR506	1-216-864-11	METAL CHIP	0	5%	1/16W
JR507	1-216-864-11	METAL CHIP	0	5%	1/16W
JR508	1-216-864-11	METAL CHIP	0	5%	1/16W
		< LIQUID CRYSTAL DISPLAY >			
LCD501	1-804-626-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL551	1-518-754-11	LAMP, PILOT (LCD BACK LIGHT)			
PL552	1-518-754-11	LAMP, PILOT (LCD BACK LIGHT)			
		< RESISTOR >			
R501	1-219-286-11	RES-CHIP	680	2%	1/16W
R502	1-219-286-11	RES-CHIP	680	2%	1/16W
R503	1-219-286-11	RES-CHIP	680	2%	1/16W
R504	1-218-847-11	RES-CHIP	1K	2%	1/16W
R505	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R506	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R507	1-218-855-11	RES-CHIP	2.2K	2%	1/16W
R508	1-218-859-11	RES-CHIP	3.3K	2%	1/16W
R509	1-218-863-11	RES-CHIP	4.7K	2%	1/16W
R510	1-218-867-11	RES-CHIP	6.8K	2%	1/16W
R511	1-219-286-11	RES-CHIP	680	2%	1/16W
R512	1-219-286-11	RES-CHIP	680	2%	1/16W
R513	1-219-286-11	RES-CHIP	680	2%	1/16W
R514	1-218-847-11	RES-CHIP	1K	2%	1/16W
R515	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R516	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R517	1-218-855-11	RES-CHIP	2.2K	2%	1/16W
R518	1-218-859-11	RES-CHIP	3.3K	2%	1/16W
R519	1-218-863-11	RES-CHIP	4.7K	2%	1/16W
R551	1-218-331-11	RES-CHIP	51K	5%	1/16W
R552	1-216-819-11	METAL CHIP	680	5%	1/16W
R554	1-216-807-11	METAL CHIP	68	5%	1/16W
R555	1-216-819-11	METAL CHIP	680	5%	1/16W
R559	1-216-806-11	RES-CHIP	56	5%	1/16W
R560	1-216-806-11	RES-CHIP	56	5%	1/16W
R561	1-216-806-11	RES-CHIP	56	5%	1/16W
R562	1-216-806-11	RES-CHIP	56	5%	1/16W
R563	1-216-817-11	METAL CHIP	470	5%	1/16W
R564	1-216-817-11	METAL CHIP	470	5%	1/16W
R565	1-216-817-11	METAL CHIP	470	5%	1/16W
R566	1-216-817-11	METAL CHIP	470	5%	1/16W
R567	1-216-817-11	METAL CHIP	470	5%	1/16W
R568	1-216-817-11	METAL CHIP	470	5%	1/16W
R569	1-216-817-11	METAL CHIP	470	5%	1/16W
R570	1-216-817-11	METAL CHIP	470	5%	1/16W
R571	1-216-817-11	METAL CHIP	470	5%	1/16W
R572	1-216-817-11	METAL CHIP	470	5%	1/16W
R573	1-216-817-11	METAL CHIP	470	5%	1/16W
R574	1-216-817-11	METAL CHIP	470	5%	1/16W
R575	1-216-817-11	METAL CHIP	470	5%	1/16W
R576	1-216-817-11	METAL CHIP	470	5%	1/16W
R577	1-216-817-11	METAL CHIP	470	5%	1/16W
R578	1-216-817-11	METAL CHIP	470	5%	1/16W
R579	1-216-817-11	METAL CHIP	470	5%	1/16W
R580	1-216-817-11	METAL CHIP	470	5%	1/16W
		< SWITCH >			
S501	1-572-704-31	SWITCH, KEYBOARD (⏏)			
S502	1-572-704-31	SWITCH, KEYBOARD (OFF)			
S503	1-572-704-31	SWITCH, KEYBOARD (SOURCE)			
S504	1-572-704-31	SWITCH, KEYBOARD (MODE)			
S505	1-572-704-31	SWITCH, KEYBOARD (SEL)			
S506	1-771-290-11	SWITCH, SLIDE (VOL)			
S507	1-572-704-31	SWITCH, KEYBOARD (ATT)			
S508	1-572-704-31	SWITCH, KEYBOARD (1/DISC –)			
S509	1-572-704-31	SWITCH, KEYBOARD (2/DISC +)			
S510	1-572-704-31	SWITCH, KEYBOARD (DSPL)			
S511	1-572-704-31	SWITCH, KEYBOARD (MBP)			
S512	1-572-704-31	SWITCH, KEYBOARD (D-BASS)			
S513	1-771-290-11	SWITCH, SLIDE (SEEK/AMS)			
S514	1-572-704-31	SWITCH, KEYBOARD (BTM)			
S515	1-572-704-31	SWITCH, KEYBOARD (SENS)			
S516	1-572-704-31	SWITCH, KEYBOARD (6)			
S517	1-572-704-31	SWITCH, KEYBOARD (5)			
S518	1-572-704-31	SWITCH, KEYBOARD (4/SHUF)			
S519	1-572-704-31	SWITCH, KEYBOARD (3/REP)			
**********					
	1-683-283-11	IN SELF SW BOARD			
		**********			
		< SWITCH >			
SW2	1-529-566-31	SWITCH, PUSH (1 KEY) (SELF)			
SW3	1-529-566-31	SWITCH, PUSH (1 KEY) (DISC IN)			
**********					

Ref. No.	Part No.	Description			Remark
	Y-8373-903-A	PLACA PRINCIPAL MONTADA			
		**********			
*	3-019-565-01	SUPORTE (IC)			
	3-041-261-11	SUPORTE (TR)			
	3-236-922-01	DISSIPADOR			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C101	1-164-346-11	CERAMIC CHIP	1uF		16V
C102	1-164-346-11	CERAMIC CHIP	1uF		16V
C103	1-104-396-11	ELECT	10uF	20%	16V
C104	1-104-396-11	ELECT	10uF	20%	16V
C105	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C110	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C111	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C113	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C114	1-124-257-00	ELECT	2.2uF	20%	50V
C115	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C116	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C117	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C118	1-164-346-11	CERAMIC CHIP	1uF		16V
C119	1-164-346-11	CERAMIC CHIP	1uF		16V
C120	1-164-346-11	CERAMIC CHIP	1uF		16V
C121	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-164-346-11	CERAMIC CHIP	1uF		16V
C202	1-164-346-11	CERAMIC CHIP	1uF		16V
C203	1-104-396-11	ELECT	10uF	20%	16V
C204	1-104-396-11	ELECT	10uF	20%	16V
C205	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C208	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C210	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C211	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C213	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C214	1-124-257-00	ELECT	2.2uF	20%	50V
C215	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C216	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C217	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C218	1-164-346-11	CERAMIC CHIP	1uF		16V
C219	1-124-234-00	ELECT	22uF	20%	16V
C220	1-164-346-11	CERAMIC CHIP	1uF		16V
C221	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C401	1-126-163-11	ELECT	4.7uF	20%	50V
C407	1-104-396-11	ELECT	10uF	20%	16V
C426	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C432	1-124-589-11	ELECT	47uF	20%	16V
C435	1-124-589-11	ELECT	47uF	20%	16V
C603	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C604	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C605	1-104-665-11	ELECT	100uF	20%	10V
C606	1-124-589-11	ELECT	47uF	20%	

Ref. No.	Part No.	Description			Remark
C608	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C609	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C610	1-104-396-11	ELECT	10uF	20%	16V
C611	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C612	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C613	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C614	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C615	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C617	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C618	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C619	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C620	1-104-665-11	ELECT	100uF	20%	10V
C621	1-104-396-11	ELECT	10uF	20%	16V
C622	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C623	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V
C624	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C625	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C626	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C627	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C631	1-104-396-11	ELECT	10uF	20%	16V
C633	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C650	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C651	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C652	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C669	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C680	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C671	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C672	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-124-584-00	ELECT	100uF	20%	10V
C702	1-124-584-00	ELECT	100uF	20%	10V
C703	1-124-584-00	ELECT	100uF	20%	10V
C705	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C704	1-124-584-00	ELECT	100uF	20%	10V
C706	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C707	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C801	1-104-396-11	ELECT	10uF	20%	16V
C802	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C803	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C804	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C809	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C810	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C841	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C842	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C846	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C847	1-164-346-11	CERAMIC CHIP	1uF		16V
C848	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C851	1-124-119-00	ELECT	330uF	20%	16V
C902	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C869	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C901	1-135-473-21	ELECT	3300uF	20%	16V
C904	1-126-160-11	ELECT	1uF	20%	50V
C905	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C907	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C909	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C913	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C914	1-104-665-11	ELECT	100uF	20%	

MAIN

Ref. No.	Part No.	Description			Remark
C915	1-110-654-11	DOUBLE LAYERS	0.047F		5.5V
C916	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C919	1-124-229-00	ELECT	33uF	20%	10V
C931	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C932	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< JACK >			
CNJ601	1-793-598-11	JACK (ANTENNA)			
		< CONNECTOR >			
CNJ801	1-580-907-32	PLUG, CONNECTOR (BUS CONTROL IN)			
CNP701	1-764-617-12	CONNECTOR, BOARD TO BOARD 30P			
CNP801	1-794-311-21	PLUG, CONNECTOR 12P			
CNP901	1-774-701-11	PIN, CONNECTOR 16P			
		< SURGE ABSORBER >			
CP601	1-803-902-21	PROTETOR PARA DESCARGA			
		< DIODE >			
D401	8-719-991-33	DIODE	1SS133T-77		
D402	8-719-988-61	DIODE	1SS355TE-17		
D444	8-719-988-61	DIODE	1SS355TE-17		
D604	8-719-923-34	DIODE	MTZJ-T-77-5.1B		
D802	8-719-109-97	DIODE	RD6.8ES-B2		
D803	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D804	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D805	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D806	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D807	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D808	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D809	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D851	8-719-420-52	DIODE	MA729TX		
D852	8-719-017-95	DIODE	KDZ18V		
D853	8-719-017-95	DIODE	KDZ18V		
D854	8-719-923-46	DIODE	MTZJ-T-77-6.8B		
D901	8-719-049-38	DIODE	1N5404TU		
D903	8-719-017-65	DIODE	MA8068-M-TX		
D907	8-719-923-95	DIODE	MTZJ-T-77-18B		
D908	8-719-923-52	DIODE	MTZJ-T-77-7.5B		
D909	8-719-109-97	DIODE	RD6.8ES-B2		
D910	8-719-923-39	DIODE	MTZJ-77-5.6C		
D913	8-719-923-68	DIODE	MTZJ-T-77-9.1C		
D915	8-719-210-03	DIODE	11ES2-TA1B		
D916	8-719-210-03	DIODE	11ES2-TA1B		
D917	8-719-210-03	DIODE	11ES2-TA1B		
D918	8-719-210-03	DIODE	11ES2-TA1B		
D919	8-719-053-18	DIODE	1SR154-400TE-25		
D920	8-719-053-18	DIODE	1SR154-400TE-25		
D921	8-719-210-03	DIODE	11ES2-TA1B		
D922	8-719-210-03	DIODE	11ES2-TA1B		
D923	8-719-923-68	DIODE	MTZJ-T-77-9.1C		
D930	8-719-109-89	DIODE	RD5.6ES-B2		
D931	8-719-988-61	DIODE	1SS355TE-17		
D932	8-719-988-61	DIODE	1SS355TE-17		
D933	8-719-074-47	DIODE	CRS02(TE85L)		
D999	8-719-991-33	DIODE	1SS133T-77		
		< IC >			
IC101	8-759-827-14	IC	TA8268AH		
IC401	8-759-827-11	IC	LC75421M-TLM-E		
IC601	8-759-586-59	IC	TB2118F-EL-S		
IC801	6-801-302-03	IC	uPD780076GK-520-9ET		
IC802	8-759-096-16	IC	MM1175XFF		
IC902	8-759-837-07	IC	S7139SF		
		< JUMPER RESISTOR >			
JR110	1-216-864-11	METAL CHIP	0	5%	1/16W
JR603	1-216-864-11	METAL CHIP	0	5%	1/16W
JR605	1-216-864-11	METAL CHIP	0	5%	1/16W
JR606	1-216-864-11	METAL CHIP	0	5%	1/16W
JR607	1-216-864-11	METAL CHIP	0	5%	1/16W
JR903	1-216-864-11	METAL CHIP	0	5%	1/16W
JR904	1-216-864-11	METAL CHIP	0	5%	1/16W
JR929	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L601	1-410-327-31	INDUCTOR	8.2uH		
L603	1-412-006-41	INDUCTOR	10uH		
L604	1-410-750-31	INDUCTOR	0.47uH		
L669	1-424-759-21	COIL (AM ANT)			
L701	1-410-330-31	INDUCTOR	22uH		
L702	1-410-330-31	INDUCTOR	22uH		
L703	1-410-513-11	INDUCTOR	22uH		
L901	1-419-476-21	COIL, CHOKE	250uH		
		< JACK >			
PJ401	1-774-699-12	JACK, PIN 4P (AUDIO OUT REAR, BUS AUDIO IN)			
		< TRANSISTOR >			
Q101	8-729-920-22	TRANSISTOR	DTC314TK-T-146		
Q102	8-729-920-22	TRANSISTOR	DTC314TK-T-146		
Q201	8-729-920-22	TRANSISTOR	DTC314TK-T-146		
Q202	8-729-920-22	TRANSISTOR	DTC314TK-T-146		
Q401	8-729-038-55	TRANSISTOR	KRA103S		
Q402	8-729-038-68	TRANSISTOR	KRC103S		
Q603	8-729-030-51	TRANSISTOR	2SA1515S-R-TP		
Q604	8-729-038-68	TRANSISTOR	KRC103S		
Q605	8-729-030-51	TRANSISTOR	2SA1515S-R-TP		
Q606	8-729-038-68	TRANSISTOR	KRC103S		
Q902	8-729-049-40	TRANSISTOR	STC2412G		
Q904	8-729-038-68	TRANSISTOR	KRC103S		
Q905	8-729-038-68	TRANSISTOR	KRC103S		
Q906	8-729-038-55	TRANSISTOR	KRA103S		
Q907	8-729-051-70	TRANSISTOR	KTC2026		
Q909	8-729-038-68	TRANSISTOR	KRC103S		

Ref. No.	Part No.	Description			Remark
Q910	8-729-052-85	TRANSISTOR 2SD1664			
Q911	8-729-038-68	TRANSISTOR KRC103S			
Q912	8-729-038-55	TRANSISTOR KRA103S			
Q913	8-729-051-70	TRANSISTOR KTC2026			
Q914	8-729-038-68	TRANSISTOR KRC103S			
Q915	8-729-049-43	TRANSISTOR STB1132Y			
Q917	8-729-822-85	TRANSISTOR 2SB1202FAST-TL			
Q918	8-729-038-55	TRANSISTOR KRA103S			
Q919	8-729-052-85	TRANSISTOR 2SD1664			
Q920	8-729-052-85	TRANSISTOR 2SD1664			
Q921	8-729-038-68	TRANSISTOR KRC103S			
Q929	8-729-038-68	TRANSISTOR KRC103S			
		< RESISTOR >			
R107	1-216-841-11	METAL CHIP	47K	5%	1/16W
R108	1-216-841-11	METAL CHIP	47K	5%	1/16W
R109	1-216-809-11	METAL CHIP	100	5%	1/16W
R110	1-216-809-11	METAL CHIP	100	5%	1/16W
R113	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R115	1-216-834-11	METAL CHIP	12K	5%	1/16W
R121	1-216-821-11	METAL CHIP	1K	5%	1/16W
R122	1-216-841-11	METAL CHIP	47K	5%	1/16W
R207	1-216-841-11	METAL CHIP	47K	5%	1/16W
R208	1-216-841-11	METAL CHIP	47K	5%	1/16W
R209	1-216-809-11	METAL CHIP	100	5%	1/16W
R210	1-216-809-11	METAL CHIP	100	5%	1/16W
R213	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R215	1-216-834-11	METAL CHIP	12K	5%	1/16W
R221	1-216-821-11	METAL CHIP	1K	5%	1/16W
R222	1-216-841-11	METAL CHIP	47K	5%	1/16W
R401	1-216-833-11	METAL CHIP	10K	5%	1/16W
R404	1-216-821-11	METAL CHIP	1K	5%	1/16W
R407	1-249-437-11	CARBON	47K	5%	1/4W
R408	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R410	1-216-805-11	METAL CHIP	47	5%	1/16W
R444	1-216-864-11	CONDUCTOR CHIP	0	5%	1/16W
R601	1-249-417-11	CARBON	1K	5%	1/4W
R602	1-216-821-11	METAL CHIP	1K	5%	1/16W
R603	1-249-407-11	CARBON	150	5%	1/4W
R604	1-216-821-11	METAL CHIP	1K	5%	1/16W
R605	1-216-841-11	METAL CHIP	47K	5%	1/16W
R606	1-216-841-11	METAL CHIP	47K	5%	1/16W
R607	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R608	1-216-833-11	METAL CHIP	10K	5%	1/16W
R609	1-216-809-11	METAL CHIP	100	5%	1/16W
R610	1-216-809-11	METAL CHIP	100	5%	1/16W
R611	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R612	1-216-833-11	METAL CHIP	10K	5%	1/16W
R613	1-216-833-11	METAL CHIP	10K	5%	1/16W
R614	1-247-807-31	CARBON	100	5%	1/4W
R615	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R616	1-216-845-11	METAL CHIP	100K	5%	1/16W
R617	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R618	1-216-845-11	METAL CHIP	100K	5%	1/16W
R619	1-216-817-11	METAL CHIP	470	5%	1/16W
R620	1-216-817-11	METAL CHIP	470	5%	1/16W
R622	1-216-817-11	METAL CHIP	470	5%	1/16W
R628	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R704	1-216-821-11	METAL CHIP	1K	5%	1/16W
R705	1-216-821-11	METAL CHIP	1K	5%	1/16W
R707	1-247-887-00	CARBON	220K	5%	1/4W
R708	1-216-821-11	METAL CHIP	1K	5%	1/16W
R709	1-216-821-11	METAL CHIP	1K	5%	1/16W
R710	1-216-821-11	METAL CHIP	1K	5%	1/16W
R711	1-216-821-11	METAL CHIP	1K	5%	1/16W
R712	1-216-821-11	METAL CHIP	1K	5%	1/16W
R714	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R716	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R806	1-216-821-11	METAL CHIP	1K	5%	1/16W
R807	1-216-821-11	METAL CHIP	1K	5%	1/16W
R808	1-216-821-11	METAL CHIP	1K	5%	1/16W
R809	1-216-821-11	METAL CHIP	1K	5%	1/16W
R810	1-216-813-11	METAL CHIP	220	5%	1/16W
R811	1-249-409-11	CARBON	220	5%	1/4W
R812	1-249-409-11	CARBON	220	5%	1/4W
R813	1-216-837-11	METAL CHIP	22K	5%	1/16W
R814	1-216-809-11	METAL CHIP	100	5%	1/16W
R815	1-216-809-11	METAL CHIP	100	5%	1/16W
R821	1-216-849-11	METAL CHIP	220K	5%	1/16W
R824	1-216-849-11	METAL CHIP	220K	5%	1/16W
R835	1-216-821-11	METAL CHIP	1K	5%	1/16W
R840	1-216-821-11	METAL CHIP	1K	5%	1/16W
R844	1-216-809-11	METAL CHIP	100	5%	1/16W
R845	1-216-809-11	METAL CHIP	100	5%	1/16W
R846	1-216-809-11	METAL CHIP	100	5%	1/16W
R847	1-216-809-11	METAL CHIP	100	5%	1/16W
R848	1-216-809-11	METAL CHIP	100	5%	1/16W
R849	1-216-809-11	METAL CHIP	100	5%	1/16W
R851	1-249-421-11	CARBON	2.2K	5%	1/4W
R852	1-216-809-11	METAL CHIP	100	5%	1/16W
R853	1-247-807-31	CARBON	100	5%	1/4W
R854	1-216-841-11	METAL CHIP	47K	5%	1/16W
R855	1-216-821-11	METAL CHIP	1K	5%	1/16W
R901	1-249-425-11	CARBON	4.7K	5%	1/4W
R906	1-216-821-11	METAL CHIP	1K	5%	1/16W
R907	1-216-841-11	METAL CHIP	47K	5%	1/16W
R908	1-216-841-11	METAL CHIP	47K	5%	1/16W
R909	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R911	1-249-417-11	CARBON	1K	5%	1/4W
R912	1-249-413-11	CARBON	470	5%	1/4W
R913	1-249-417-11	CARBON	1K	5%	1/4W
R917	1-249-409-11	CARBON	220	5%	1/4W
R918	1-216-845-11	METAL CHIP	100K	5%	1/16W

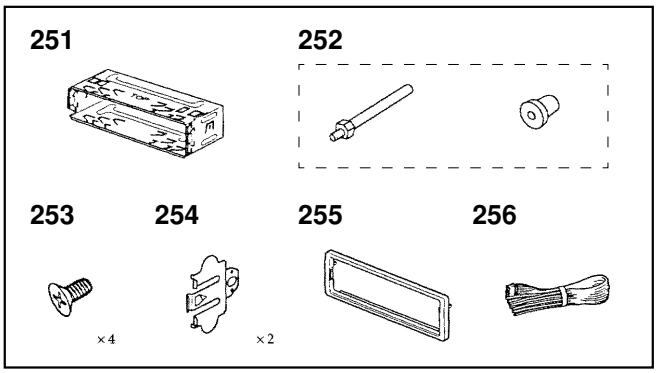
MAIN **SERVO**

Ref. No.	Part No.	Description			Remark
R919	1-249-421-11	CARBON	2.2K	5%	1/4W
R920	1-216-849-11	METAL CHIP	220K	5%	1/16W
R922	1-208-806-11	RES-CHIP	10K	0.5%	1/10W
R923	1-208-806-11	RES-CHIP	10K	0.5%	1/10W
R924	1-249-404-00	CARBON	82	5%	1/4W
R925	1-249-404-00	CARBON	82	5%	1/4W
R926	1-249-404-00	CARBON	82	5%	1/4W
R927	1-249-404-00	CARBON	82	5%	1/4W
R928	1-249-404-00	CARBON	82	5%	1/4W
R929	1-249-404-00	CARBON	82	5%	1/4W
R930	1-249-395-11	CARBON	15	5%	1/4W
R931	1-218-867-11	RES-CHIP	6.8K	5%	1/16W
R932	1-249-421-11	CARBON	2.2K	5%	1/4W
R933	1-216-821-11	METAL CHIP	1K	5%	1/16W
R934	1-249-409-11	CARBON	220	5%	1/4W
		< SWITCH >			
S901	1-762-638-11	SWITCH, TACTILE (RESET)			
		< THERMISTOR (POSITIVE) >			
TH851	1-801-792-21	THERMISTOR, POSITIVE			
TH901	1-809-842-21	THERMISTOR PTH8L07AR2R0M1B510			
		< TUNER >			
TU601	A-3282-064-A	TUNER UNIT (TUX-010)			
		< VIBRATOR >			
X601	1-781-246-21	VIBRATOR, CRYSTAL (10.25MHz)			
X801	1-795-259-21	VIBRATOR, CERAMIC (8.38MHz)			
X802	1-567-098-41	VIBRATOR, CRYSTAL (32kHz)			
**********					
	A-3283-233-A	SERVO BOARD, COMPLETE			
		**********			
	1-683-284-11	FLEXIBLE BOARD			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-104-609-11	ELECT CHIP	100uF	20%	4V
C5	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C9	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C10	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C11	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V
C13	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C14	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C17	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V

Ref. No.	Part No.	Description			Remark
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C25	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C26	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C27	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C29	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C30	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C34	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C35	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C37	1-126-393-11	ELECT CHIP	33uF	20%	10V
C38	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C40	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C41	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C44	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN1	1-815-352-11	CONNECTOR, BOARD TO BOARD 30P			
CN3	1-816-275-11	CONNECTOR, FFC/FPC 6P			
		< JUMPER RESISTOR >			
FB1	1-216-864-11	METAL CHIP	0	5%	1/16W
FB2	1-216-864-11	METAL CHIP	0	5%	1/16W
FB3	1-216-864-11	METAL CHIP	0	5%	1/16W
FB4	1-216-864-11	METAL CHIP	0	5%	1/16W
FB6	1-216-864-11	METAL CHIP	0	5%	1/16W
FB7	1-216-864-11	METAL CHIP	0	5%	1/16W
		< IC >			
IC1	8-759-699-98	IC uPD63711GC-8EU			
IC2	8-759-658-87	IC BA5810FP-E2			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
		< RESISTOR >			
R3	1-216-797-11	METAL CHIP	10	5%	1/16W
R5	1-218-344-11	RES-CHIP	7.5K	5%	1/16W
R6	1-216-837-11	METAL CHIP	22K	5%	1/16W
R7	1-216-839-11	METAL CHIP	33K	5%	1/16W
R8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R9	1-216-840-11	METAL CHIP	39K	5%	1/16W
R10	1-216-835-11	METAL CHIP	15K	5%	1/16W
R12	1-216-837-11	METAL CHIP	22K	5%	1/16W
R14	1-216-841-11	METAL CHIP	47K	5%	1/16W
R15	1-216-841-11	METAL CHIP	47K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R17	1-216-809-11	METAL CHIP	100	5%	1/16W
R18	1-216-809-11	METAL CHIP	100	5%	1/16W
R19	1-216-809-11	METAL CHIP	100	5%	1/16W
R20	1-216-809-11	METAL CHIP	100	5%	1/16W
R21	1-216-821-11	METAL CHIP	1K	5%	1/16W
R22	1-216-821-11	METAL CHIP	1K	5%	1/16W
R24	1-216-864-11	METAL CHIP	0	5%	1/16W
R25	1-216-864-11	METAL CHIP	0	5%	1/16W
R26	1-216-797-11	METAL CHIP	10	5%	1/16W
R29	1-216-833-11	METAL CHIP	10K	5%	1/16W
R30	1-216-833-11	METAL CHIP	10K	5%	1/16W
		< SWITCH >			
SW1	1-762-944-12	SWITCH, DETECTION (SMALL TYPE) (DOWN)			
		< VIBRATOR >			
X1	1-795-520-21	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
	1-683-282-11	SL SW BOARD			
		**********			
		< SWITCH >			
SW4	1-529-565-41	SWITCH, PUSH (1 KEY) (LIMIT)			
**********					
	1-683-830-11	SPEAKER BOARD (supplied with MAIN BOARD, COMPLETE)			
		**********			
**********					
		MISCELLANEOUS			
		**********			
3	1-757-974-11	CORD (WITH CONNECTOR) (POWER)			
201	X-3378-480-1	CHASSIS (OP) ASSY (including M901)			
207	1-823-641-11	CABLE, FLEXIBLE FLAT (6 CORE)			
⚠210	8-820-103-11	PICK-UP, OPTICAL KSS-720A/C-RP			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)			
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)			
**********					

Ref. No.	Part No.	Description	Remark
		ACESSÓRIOS	
		**********	
	3-241-901-11	MANUAL DE INSTRUÇÃO	
	3-241-908-11	MANUAL DE INSTALAÇÃO	
	3-019-685-22	ESTOJO PARA FRENTE DESTACÁVEL	
**********			
		PEÇAS PARA INSTALAÇÃO E CONEXÃO	
		**********	
251	3-014-370-22	SUPORTE DE FIXAÇÃO	
252	X-3366-405-1	KIT DE PARAFUSOS PARA MONTAGEM	
253	3-934-325-01	SCREW (+K 5X8 TP)	
254	3-030-929-04	MOLA DE FIXAÇÃO	
255	X-3381-487-1	ORNAMENTO DO PAINEL	
256	1-757-974-11	CABO CONECTOR	



Os componentes identificados com a marca ⚠ são críticos para a segurança. Somente os substitua por peças numericamente identificadas nesse manual.

Sony Comércio e Indústria Ltda.
Assessoria Técnica Consumidor
Depto. Técnico – Abril/2002
http://www.sony.com.br